DOCUMENT RESUME

ED 068 275 SE 014 488

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| TITLE | Bibliography of Water Quality Research Reports. |
| INSTITUTION | Environmental Protection Agency, Washington, D. C. Office of Research and Monitoring. |
| PUB DATE | Jun 72 |
| NOTE | 50p.; Water Pollution Control Research Series |
| EDRS PRICE | MF-$0.65 HC-$3.29 |
| DESCRIPTORS | *Bibliographies; *Environmental Research; Government Publications; Pollution; Quality Control; *Reports; Technology; *Water Pollution Control |

ABSTRACT

Prepared for the Environmental Protection Agency (EPA), this bibliography of published reports covers information concerning the advancement of water pollution control technology and knowledge. The reports provide a central source of information on the research, development, and demonstration activities in the water research program of the EPA, through inhouse research and grants and contracts with Federal, State, and local agencies, research institutions, and industrial organizations. Items are categorized as: (1) Municipal Pollution Control, (2) Industrial Pollution Control, (3) Agricultural Pollution Control, (4) Mining Pollution Control, (5) Other Sources of Pollution Control, (6) Water Quality Control, (7) Waste Treatment and Ultimate Disposal, and (8) Water Quality Requirements Research. Each entry lists report number, title and author of report, source of availability, and cost of purchase. Over 600 reports are noted. (BL)

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WATER POLLUTION CONTROL RESEARCH SERIES

# Bibliography of Water Quality Research Reports

JUNE, 1972

OFFICE OF RESEARCH AND MONITORING
U.S. Environmental Protection Agency
Washington, D.C. 20460

SE 014 488

## FOREWORD

In July 1969 a program was established for the dissemination of information concerning the advancement of water pollution control technology and knowledge. This information is in the form of technical reports of EPA-sponsored research and development grant, contract, and inhouse projects. Collectively, the reports are called the Water Pollution Control Research Series and describe the results and progress in the control and abatement of pollution in our Nation's waters. They provide a central source of information on the research, development, and demonstration activities in the water research program of the Environmental Protection Agency, through inhouse research and grants and contracts with Federal, State, and local agencies, research institutions, and industrial organizations.

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| 11010ESQ08/71 | Design Guides for Biological Wastewater Treatment Process; by the City of Austin, Texas, and the Center for Research in Water Resources, Univ. of Texas, Austin, Texas | GPO - $1.75 |
| 11010EVE01/71 | Evaluation of Conditioning and Dewatering Sewage Sludge by Freezing; by Sewerage Commission of the City of Milwaukee, Wisconsin | GPO - 70¢ |
| 11010FLQ03/71 | Phosphorus Removal with Pickle Liquor in an Activated Sludge Plant; by Sewerage Commission of the City of Milwaukee, Wisconsin | GPO - $1.25<br>NTIS - PB 208 216 |
| 11010FMY10/70 | Engineering Feasibility Demonstration Study for Muskegon County, Michigan Wastewater Treatment-Irrigation System; by Muskegon County Board and Dept. of Public Works, Muskegon, Michigan | GPO - $1.50<br>NTIS - PB 197 447 |
| **1102 - Combined Sewer Discharges** | | |
| 11020---09/67 | Demonstrate the Feasibility of the Use of Ultrasonic Filtration in Treating the Overflows from Combined and/or Storm Sewers; by Acoustica Assoc., Inc., Los Angeles, Calif. | NTIS - PB 201 745 |
| 11020---12/67 | Problems of Combined Sewer Facilities and Overflows - 1967; by American Public Works Association, Chicago, IL | GPO - $1.00 |
| 11020---05/68 | Feasibility of a Stabilization-Retention Basin in Lake Erie at Cleveland, Ohio; by Havens and Emerson, Cleveland, Ohio | NTIS - PB 195 083 |
| 11020---06/69 | Reduction in Infiltration by Zone Pumping; by Hoffman and Fiske, Lewiston, Idaho | NTIS - PB 187 868 |
| 11020---10/69 | Crazed Resin Filtration of Combined Sewer Overflows; by Hercules, Inc., Wilmington, Delaware | NTIS - PB 187 867 |

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| 11020---03/70 | Combined Sewer Overflow Seminar Papers; by Storm and Combined Sewer Pollution Control Branch, Division of Applied Science and Technology, FWQA, Washington, D.C. | NTIS - PB 199 361 |
| 11020---02/71 | Deep Tunnels in Hard Rock; by College of Applied Science and Engineering and Univ. Extension, Univ. of Wisconsin, Milwaukee, Wisconsin | GPO - $1.75 |
| 11020DES06/69 | Selected Urban Storm Water Runoff Abstracts; by The Franklin Institute, Phila., Pa. | NTIS - PB 185 314 |
| 11020DGZ10/69 | Design of a Combined Sewer Fluidic Regulator; by Bowles Engineering Corp., Silver Spring, Maryland | NTIS - PB 188 914 |
| 11020DHQ06/72 | Ground Water Infiltration and Internal Sealing of Sanitary Sewers, Montgomery County, Ohio; by G. E. Cronk, Montgomery County Sanitary Dept., Dayton, OH | (At press) |
| 11020DIG08/69 | Polymers for Sewer Flow Control; by The Western Co., Richardson, Texas | NTIS - PB 185 951 |
| 11020DIH06/69 | Improved Sealants for Infiltration Control; by The Western Company, Richardson, Texas | GPO - $1.25<br>NTIS - PB 185 950 |
| 11020DNO08/67 | Feasibility of a Periodic Flushing System for Combined Sewer Cleansing; by FMC Corp., Santa Clara, California | NTIS - PB 195 223 |
| 11020DNO03/72 | A Flushing System for Combined Sewer Cleansing; by Central Engineering Laboratories, FMC Corporation, Santa Clara, California | GPO - $1.75 |
| 11020DWF12/69 | Control of Pollution by Underwater Storage; by Underwater Storage, Inc., and Silver Schwartz, Ltd., Washington, D.C. | GPO - $1.75<br>NTIS - PB 191 217 |
| 11020EKO10/69 | Combined Sewer Separation Using Pressure Sewers; by American Society of Civil Engineers, Cambridge, Massachusetts | NTIS - PB 188 511 |
| 11020EXV07/69 | Strainer/Filter Treatment of Combined Sewer Overflows; by Fram Corporation, East Providence, Rhode Island | NTIS - PB 185 949 |
| 11020FAL03/71 | Evaluation of Storm Standby Tanks, Columbus, Ohio; by Dodson, Kinney & Lindblom, Columbus, Ohio | GPO - $1.50<br>NTIS - PB 202 236 |
| 11020FAQ03/71 | Dispatching System for Control of Combined Sewer Losses; by Metro. Sewer Board, St. Paul, Minnesota | GPO - $1.75<br>NTIS - PB 203 678 |
| 11020FDC01/72 | Screening/Flotation Treatment of Combined Sewer Overflows; by The Ecology Division, Rex Chainbelt, Inc., Milwaukee, Wisconsin | GPO - $1.50 |
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| 11022DEI05/72 | Sewer Bedding and Infiltration Gulf Coast Area; by J. K. Mayer, F. W. Macdonald, and S. E. Steimle; Tulane University, New Orleans, Louisiana | GPO - $1.50 |
| 11022DMU07/70 | Combined Sewer Regulator Overflow Facilities; by American Public Works Association, Chicago, Illinois | GPO - $1.50 |
| 11022DMU08/70 | Combined Sewer Regulation and Management - A Manual of Practice; by American Public Works Association, Chicago, Illinois | GPO - $1.50<br>NTIS - PB 195 676 |
| 11022DPP10/70 | Combined Sewer Temporary Underwater Storage Facility; by Melpar, Falls Church, VA | GPO - $1.75<br>NTIS - PB 197 669 |
| 11022ECV09/71 | Underwater Storage of Combined Sewer Overflows; by Karl R. Rohrer Associates, Inc., Akron, Ohio | GPO - $1.50<br>NTIS - PB 208 346 |
| 11022EFF12/70 | Control of Infiltration and Inflow into Sewer Systems; by American Public Works Association, Chicago, Illinois | GPO - $1.25<br>NTIS - PB 200 827 |
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| 11022ELK12/71 | Maximizing Storage in Combined Sewer Systems; by Municipality of Metropolitan Seattle, Washington | GPO - $1.75<br>NTIS - PB 209 861 |
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| 11023DAA03/72 | Hypochlorite Generator for Treatment of Combined Sewer Overflows; by Ionics, Inc., Watertown, Massachusetts | GPO - $1.00 |
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| 11023EYI04/72 | High Rate Filtration of Combined Sewer Overflows; by Ross Nebolsine, P. J. Harvey, and Chi-Yuan Fan, Hydrotechnic Corporation, New York, NY | GPO - $2.50 |
| 11023FDB09/70 | Chemical Treatment of Combined Sewer Overflows; by Dow Chemical Company, Midland, Michigan | GPO - $1.50<br>NTIS - PB 199 070 |
| 11023FDD03/70 | Rotary Vibratory Fine Screening of Combined Sewer Overflows; by Cornell, Howland, Hayes and Merryfield, Corvallis, Oregon | GPO - $1.00<br>NTIS - PB 195 168 |

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| 11023FDD07/71 | Demonstration of Rotary Screening for Combined Sewer Overflows; by City of Portland, Dept. of Public Works, Portland, Oregon | GPO - 65¢<br>NTIS - PB 206 814 |
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| 11024DMS05/70 | Engineering Investigation of Sewer Overflow Problems; by Hayes, Seay, Mattern and Mattern, Roanoke, Virginia | GPO - $2.00<br>NTIS - PB 195 201 |
| 11024DOC07/71 | Storm Water Management Model, Vol. I, Final Report; by Metcalf & Eddy Engineers, Palo Alto, California | GPO - $2.75<br>NTIS - PB 203 289 |
| 11024DOC08/71 | Storm Water Management Model, Vol. II, Verification and Testing; by Metcalf & Eddy Engineers, Palo Alto, California | GPO - $1.50<br>NTIS - PB 203 290 |
| 11024DOC09/71 | Storm Water Management Model, Vol. III, User's Manual; by Metcalf & Eddy Engineers, Palo Alto, California | GPO - $2.75<br>NTIS - PB 203 291 |
| 11024DOC10/71 | Storm Water Management Model, Vol. IV, Program Listing; by Metcalf & Eddy Engineers, Palo Alto, California | GPO - $2.00<br>NTIS - PB 203 292 |
| 11024DOK02/70 | Proposed Combined Sewer Control by Electrode Potential; by Merrimack College, Andover, Massachusetts | NTIS - PB 195 169 |
| 11024DQU10/70 | Urban Runoff Characteristics; by Univ. of Cincinnati, Cincinnati, Ohio | GPO - $2.75<br>NTIS - PB 202 865 |
| 11024EJC07/70 | Selected Urban Storm Water Runoff Abstracts, July 1968-June 1970; by The Franklin Inst. Research Laboratories, Philadelphia, PA | GPO - $2.75<br>NTIS - PB 198 228 |
| 11024EJC10/70 | Selected Urban Storm Water Runoff Abstracts, First Quarterly Issue; by The Franklin Inst. Research Laboratories, Philadelphia, PA | GPO - 50¢<br>NTIS - PB 198 229 |
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| 11024ELB01/71 | Storm and Combined Sewer Pollution Sources and Abatement, Atlanta, Ga.; by Black, Crow and Eidsness, Inc., Atlanta, Georgia | NTIS - PB 201 725 |
| 11024EQE06/71 | Impregnation of Concrete Pipe; by Southwest Research Insti., San Antonia, Texas | GPO - 75¢ |

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| 11024EQG03/71 | Storm Water Problems and Control in Sanitary Sewers, Oakland and Berkeley, California; by Metcalf & Eddy Engineers, Palo Alto, California | GPO - $4.00<br>NTIS - PB 208 815 |
| 11024EXF08/70 | Combined Sewer Overflow Abatement Alternatives, Washington, D.C.; by Roy F. Weston, Inc., West Chester, Pennsylvania | GPO - $2.00<br>NTIS - PB 203 680 |
| 11024FJE04/71 | Selected Urban Storm Water Runoff Abstracts, Third Quarterly Issue; by Franklin Institute Research Laboratories, Philadelphia, PA | GPO - 75¢ |
| 11024FJE07/71 | Selected Urban Storm Water Runoff Abstracts, July 1970-June 1971; by The Franklin Inst. Research Laboratories, Philadelphia, PA | GPO - $1.50 |
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| 11030DNK08/68 | The Beneficial Use of Storm Water; by Hittman Associates, Inc., Baltimore, Maryland | NTIS - PB 195 160 |
| 11030DNS01/69 | Water Pollution Aspects of Urban Runoff; by American Public Works Asso., Chicago, IL | GPO - $1.50 |
| 11034DUY03/72 | Investigation of Porous Pavements for Urban Runoff Control; by E. Thelen, W. C. Grover, A. J. Hoiberg, and T. I. Haigh, Franklin Inst. Research Laboratories, Philadelphia, Pennsylvania | GPO - $1.25 |
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| 11034FLU06/71 | Hydraulics of Long Vertical Conduits and Associated Cavitation; by Univ. of Minnesota, Minneapolis, Minnesota | GPO - 60¢ |
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| 11040GKK06/71 | Environmental Impact of Highway Deicing; by Edison Water Quality Lab., EPA, Edison, NJ | GPO - $1.25<br>NTIS - PB 203 493 |

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| **1105 - Non-sewered Municipal Wastes** | | |
| 11050FKE12/69 | A Study of Flow Reduction and Treatment of Wastewater from Households; by General Dynamics Electric Boat Div., Groton, Conn. | GPO - $1.25<br>NTIS - PB 197 599 |
| **1106 - Joint (Mun./Ind.) Wastes** | | |
| 11060DPD02/71 | Combined Treatment of Municipal Kraft Linerboard and Fiberboard Manufacturing Wastes; by Board of Water Commissioners, City of Macon, Georgia; Georgia Kraft Co.; and Armstrong Cork Company | GPO - $1.25<br>NTIS - PB 208 215 |
| 11060EOC07/69 | Joint Municipal and Semichemical Pulping Wastes; by City of Erie, Pennsylvania | GPO - $1.50<br>NTIS - PB 185 948 |
| 11060FAE11/69 | Feasibility of Joint Treatment in a Lake Watershed; by Roy F. Weston, Inc., West Chester, Pennsylvania | NTIS - PB 201 698 |
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| 12000FLX02/71 | A System for Industrial Waste Treatment RD&D Project Priority Assignment; by Synectics Corp., Allison Park, PA | GPO - $1.00<br>NTIS - PB 206 146 |
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| 12010DPF11/71 | Brass Wire Mill Process Changes and Waste Abatement, Recovery and Reuse; by Volco Brass and Copper Co., Kenilworth, NJ | GPO - 55¢ |
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| 12010EIE11/68 | A State of the Art Review of Metal Finishing Waste Treatment; by Battelle Memorial Institute, Columbus, Ohio | GPO - $1.00<br>NTIS - PB 203 207 |
| 12010EIE03/71 | An Investigation of Techniques for Removal of Chromium from Electroplating Wastes; by Battelle Memorial Institute, Columbus, OH | GPO - $1.00 |
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| 12010EZV02/70 | Treatment of Waste Water-Waste Oil Mixtures; by Armco Steel Corp., Middletown, Ohio | GPO - $2.50<br>NTIS - PB 195 161 |

1202 - Chemicals and Allied Products

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| 12020---02/70 | Petrochemical Effluents Treatment Practices - Summary; by Engineering-Sciences, Inc./ Texas, Austin, Texas | NTIS - PB 192 310 |
| 12020DIS01/72 | Anaerobic Treatment of Synthetic Organic Wastes; by J. C. Hovious, J. A. Fisher, and R. A. Conway, Union Carbide Corp., South Charleston, West Virginia | GPO - $1.75 |
| 12020DJI06/71 | Wastewater Treatment Facilities for a Polyvinyl Chloride Production Plant; by B. F. Goodrich Chemical Co., Cleveland, OH | (At press) |
| 12020DQC03/71 | Polymeric Materials for Treatment and Recovery of Petrochemical Wastes; by Gulf South Research Institute, New Orleans, LA | GPO - 70¢<br>NTIS - PB 201 699 |
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| 12020EID03/71 | Preliminary Investigational Requirements - Petrochemical and Refinery Waste Treatment; by Engineering-Science, Inc., Austin, Texas | GPO - $1.50 |
| 12020EJI07/71 | Inorganic Chemicals Industry Profile; by Datagraphics, Inc., Pittsburgh, PA | GPO - $1.75<br>NTIS - PB 206 308 |
| 12020EXG03/72 | The Effect of Chlorination on Selected Organic Chemicals; by The Manufacturing Chemists Association, Washington, D.C. | GPO - $1.00 |

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| 12020FYE01/72 | The Pesticide Manufacturing Industry - Current Waste Treatment and Disposal Practices; by P. R. Atkins, Univ. of Texas, Austin, TX | GPO - $1.00 |
| 12020GND07/71 | Projected Wastewater Treatment Costs in the Organic Chemicals Industry; by Data-graphics, Inc., Pittsburgh, PA | GPO - $1.50<br>NTIS - PB 206 429 |
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| 12040DLQ08/71 | Slime Growth Evaluation of Treated Pulp Mill Waste; by Dept. of Microbiology, Oregon State Univ., Corvallis, Oregon | GPO - 60¢ |
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| 12040EEK08/71 | Treatment of Selected Internal Kraft Mill Wastes in a Cooling Tower; by Georgia Kraft Company, Rome, Georgia | GPO - $1.25<br>NTIS - PB 208 217 |
| 12040EEL02/72 | Reverse Osmosis Concentration of Dilute Pulp and Paper Effluents; by A. J. Wiley, G. A. Dubey, and I. K. Bansal, The Pulp Manufacturers Research League and The Institute of Paper Chemistry, Appleton, WI | GPO - $2.75 |
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| 12040EMY12/71 | Multi-System Biological Treatment of Bleached Kraft Effluents; by The Mead Corporation, Chillicothe, Ohio | GPO - $2.00<br>NTIS - PB 208 213 |
| 12040ENC12/71 | Color Removal from Kraft Pulping Effluent by Lime Addition; by Interstate Paper Corp., Riceboro, Georgia | GPO - $1.25 |
| 12040EUG10/69 | Foam Separation of Kraft Pulping Wastes; by Georgia Kraft Co., Rome, Georgia | NTIS - PB 189 160 |
| 12040EZZ04/70 | Dilute Spent Kraft Liquor Filtration through Wood Chips; by School of Forest Resources, Univ. of North Carolina, Raleigh, North Carolina | NTIS - PB 191 873 |

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|---|---|---|
| 12040FES07/71 | Sludge Material Recovery System for Manufacturers of Pigmented Papers; by S. D. Warren Co., Div. of Scott Paper Co., Westbrook, Maine | GPO - $1.00 |
| 12040FUB01/72 | Recycle of Papermill Waste Waters and Application of Reverse Osmosis; by D. C. Morris, W. R. Nelson & G. O. Walraven, Green Bay Packaging, Inc., Green Bay, WI | GPO - $1.00 |
| 1205 - Petroleum and Coal Products | | |
| 12050DRC11/71 | Experimental Evaluation of Fibrous Bed Coalescers for Separating Oil-Water Emulsions; by Dept. of Chemical Engineering, Illinois Institute of Technology, Chicago, Illinois | GPO - $1.75<br>NTIS - PB 210 144 |
| 12050DSH03/71 | The Impact of Oily Materials on Activated Sludge Systems; by Hydroscience, Inc., Westwood, NJ | GPO - $1.25 |
| 12050EKT03/71 | Fluid Bed Incineration of Petroleum Refinery Wastes; by American Oil Co., Mandan, ND | GPO - $1.50<br>NTIS - PB 202 570 |
| 1206 - Food and Kindred Products | | |
| 12060---03/68 | Potato Waste Treatment (Proceedings of a Symposium); by Univ. of Idaho and FWPCA Pacific Northwest Water Lab., Corvallis, OR | NTIS - PB 208 218 |
| 12060---03/68 | Aerated Lagoon Treatment of Food Processing Wastes; by Kenneth A. Dostal, Pacific Northwest Water Lab., WQO, EPA, Corvallis, OR | GPO - 55¢ |
| 12060---07/69 | Secondary Treatment of Potato Processing Wastes; by Kenneth A. Dostal, Pacific Northwest Water Lab., WQO, EPA, Corvallis, Oregon | GPO - 65¢<br>NTIS - PB 202 234 |
| 12060---10/69 | Current Practice in Potato Processing Waste Treatment; by Univ. of Washington, Seattle, Washington | GPO - $1.00<br>NTIS - PB 189 232 |
| 12060---04/70 | Proceedings First National Symposium on Food Processing Wastes; by FWQA, USDA, National Canners Association and Northwest Food Processors Association | GPO - $3.00<br>NTIS - PB 199 709 |
| 12060---08/70 | Waste Reduction in Food Canning Operations; by National Canners Asso., Berkeley, CA | GPO - $1.00<br>NTIS - PB 198 231 |
| 12060---10/70 | Treatment of Citrus Processing Wastes; by The Coca-Cola Co., Foods Div., Orlando, FL | GPO - $2.75<br>NTIS - PB 202 238 |
| 12060---03/71 | Proceedings Second Annual Symposium on Food Processing Wastes; by Pacific Northwest Water Lab., EPA, Corvallis, Oregon and National Canners Association | GPO - $4.50 |

| Report Number | Title/Author | Source |
|---|---|---|
| 12060DSB09/71 | Demonstration of a Full-Scale Waste Treatment System for a Cannery; by L. E. Streebin, G. W. Reid, and A. C. H. Hu; Univ. of Oklahoma, Norman, Oklahoma | GPO - $1.50 |
| 12060DSI07/71 | State-of-Art, Sugarbeet Processing Waste Treatment; by Beet Sugar Development Foundation, Ft. Collins, Colorado | GPO - $1.25<br>NTIS - PB 207 646 |
| 12060DXF07/71 | Membrane Processing of Cottage Cheese Whey for Pollution Abatement; by Crowley's Milk Company, Binghamton, New York | GPO - $1.25 |
| 12060DXL01/71 | Reduction of Salt Content of Food Processing Liquid Waste Effluent; by National Canners Association, Berkeley, California | GPO - 55¢<br>NTIS - PB 203 963 |
| 12060EAE09/71 | Trickling Filter Treatment of Fruit Processing Waste Waters; by National Canners Association, Berkeley, California | GPO - 50¢ |
| 12060ECF04/70 | Current Practice in Seafoods Processing Waste Treatment; by Oregon State Univ., Corvallis, Oregon | NTIS - PB 202 232 |
| 12060EDK08/71 | Liquid Wastes from Canning and Freezing Fruits and Vegetables; by National Canners Association, Berkeley, California | GPO - $1.50<br>NTIS - PB 209 941 |
| 12060EDZ08/71 | Pilot Plant Installation for Fungal Treatment of Vegetable Canning Wastes; by The Green Giant Co., Le Suer, Minnesota | GPO - $1.00<br>NTIS - PB 208 206 |
| 12060EGU03/71 | Dairy Food Plant Wastes and Waste Treatment Practices; by Dept. of Dairy Tech., Ohio State University, Columbus, Ohio | GPO - $4.00 |
| 12060EHT07/70 | Use of Fungi Imperfecti in Waste Control; by North Star Research & Development Institute, Minneapolis, Minnesota | GPO - $1.00<br>NTIS - PB 202 231 |
| 12060EHU03/71 | Reconditioning of Food Processing Brines; by National Canners Asso., Berkeley, Calif. | GPO - 75¢ |
| 12060EHV12/70 | Aerobic Secondary Treatment of Potato Processing Wastes; by R. T. French Company, Shelley, Idaho | GPO - $1.50<br>NTIS - PB 200 623 |
| 12060EZP09/70 | Cannery Waste Treatment Kehr Activated Sludge; by FMC Corp., Santa Clara, Calif. | GPO - 70¢<br>NTIS - PB 199 071 |
| 12060EZY08/71 | Complete Mix Activated Sludge Treatment of Citrus Process Wastes; by Winter Garden Citrus Products Cooperative, Winter Garden, Florida | GPO - $1.25 |
| 12060FAD10/69 | Aerobic Treatment of Fruit Processing Wastes; by Snokist Growers, Yakima, WA | NTIS - PB 188 506 |
| 12060FDS11/71 | Elimination of Water Pollution by Packinghouse Animal Paunch and Blood; by Beefland International, Inc., Council Bluffs, Iowa | GPO - 50¢ |

| Report Number | Title/Author | Source |
|---|---|---|
| 12060FQE12/70 | Dry Caustic Peeling of Tree Fruit for Liquid Waste Reduction; by National Canners Association, Berkeley, California | GPO - 60¢<br>NTIS - PB 208 209 |
| **1208 - Stone, Clay & Glass Products** | | |
| 12080EZF09/70 | Phenolic Water Reuse by Diatomite Filtration; by Johns-Manville Products Corp., Manville, New Jersey | GPO - $1.25<br>NTIS - PB 199 069 |
| **1209 - Textile Mill Products** | | |
| 12090DWM01/71 | Bio-Regenerated Activated Carbon Treatment of Textile Dye Wastewater; by Fram Corp., Providence, Rhode Island | GPO - $1.00<br>NTIS - PB 203 599 |
| 12090ECS02/71 | State of the Art of Textile Waste Treatment; by Clemson University, Clemson, SC | GPO - $2.50 |
| 12090EOE01/72 | Water Pollution Reduction Through Recovery of Desizing Wastes; by Dept. of Textile Chemistry, North Carolina State Univ., Raleigh, North Carolina | GPO - 60¢ |
| 12090ESG01/71 | Zinc Precipitation and Recovery from Viscose Rayon Wastewater; by American Enka Co., Enka, North Carolina | GPO - $1.00<br>NTIS - PB 205 205 |
| 12090EUX10/70 | Reuse of Chemical Fiber Plant Wastewater and Cooling Water Blowdown; by Fiber Industries, Inc., Charlotte, NC and Davis & Floyd Engineers, Inc., Greenwood, South Carolina | GPO - 70¢<br>NTIS - PB 200 695 |
| **1212 - Miscellaneous Industrial Sources** | | |
| 12120---09/69 | Activated Sludge Treatment of Chrome Tannery Wastes; by A. C. Lawrence Company, Peabody, Massachusetts | GPO - $2.00<br>NTIS - PB 186 158 |
| 12120---09/70 | Treatment of Sole Leather Vegetable Tannery Wastes; by Dr. J. David Eye, Univ. of Cincinnati, Cincinnati, Ohio | GPO - $1.25<br>NTIS - PB 199 068 |
| 12120DIK12/70 | Anaerobic-Aerobic Lagoon Treatment for Vegetable Tanning Wastes; by Univ. of Virginia, Charlottesville, Virginia | GPO - $1.00<br>NTIS - PB 202 235 |
| 12120ERC08/69 | Disposal of Wastes from Water Treatment Plants; by American Water Works Association Research Foundation, New York, NY | NTIS - PB 186 157 |
| 12120ESW06/71 | Magnesium Carbonate, A Recycled Coagulant for Water Treatment; by Dept. of Public Utilities, City of Gainesville, Florida | GPO - $1.00 |

| Report Number | Title/Author | Source |
|---|---|---|
| 12120EUR11/71 | Information Resource: Water Pollution Control in the Water Utility Industry; by American Water Works Association Research Foundation, New York, NY | GPO - $1.50 |
| 12120FYF03/72 | Fluidized-Bed Incineration of Selected Carbonaceous Industrial Wastes; by Battelle Laboratories, Columbus, Ohio | GPO - $1.00 |
| 1213 - Joint (Ind./Mun.) Wastes | | |
| 12130DUJ09/71 | Whey Effluent Packed Tower Trickling Filtration; by Quirk, Lawler & Matusky Engineers, Tappan, New York for the Village of Walton, New York | GPO - $1.50 |
| 12130EDX07/70 | Joint Treatment of Municipal Sewage and Pulp Mill Effluents; by The Green Bay Metro. Sewerage District, Green Bay, WI | GPO - $6.00 |
| 12130EGK06/71 | Biological Treatment of Chlorophenolic Wastes; by the City of Jacksonville, AK | GPO - $1.50<br>NTIS - PB 206 813 |
| 12130EZR05/71 | Combined Treatment of Domestic and Industrial Wastes by Activated Sludge; by City of Dallas, Oregon | GPO - $1.25<br>NTIS - PB 205 206 |
| 12130FJQ06/71 | Pollution Abatement and By-Product Recovery in Shellfish and Fisheries Processing; by Food, Chemical and Research Laboratories, Inc., Seattle, Washington, and Engineering-Science of Alaska, Anchorage, Alaska | GPO - $1.00<br>NTIS - PB 208 214 |
| | Agricultural Pollution Control | |
| 1301 - Forestry and Logging | | |
| 13010---02/70 | Industrial Waste Guide on Logging Practices; by Northwest Region, FWPCA, Portland, OR | NTIS - PB 207 644 |
| 1301[illegible]EGA02/71 | Studies on Effects of Watershed Practices on Streams; by Oregon State Univ., Corvallis, Oregon | GPO - $1.50 |
| 1302 - Agricultural Run-off | | |
| 13020---07/71 | Agricultural Pollution of the Great Lakes Basin; by Governments of the United States and Canada | GPO - $1.50<br>NTIS - PB 206 906 |
| 13020DGX08/71 | Role of Animal Wastes in Agricultural Land Runoff; by School of Agricultural and Life Sciences, North Carolina State Univ., Raleigh, North Carolina | GPO - $1.25<br>NTIS - PB 209 213 |

| Report Number | Title/Author | Source |
|---|---|---|
| 13020DPB08/71 | Management of Nutrients on Agricultural Land for Improved Water Quality; by Dept. of Agronomy, College of Agriculture and Life Science, Cornell Univ., Ithaca, NY | GPO - $1.25<br>NTIS - PB 209 858 |

1303 - Irrigation Return Flows

| | | |
|---|---|---|
| 13030---05/69 | Characteristics and Pollution Problems of Irrigation Return Flow; by Utah State Univ. Foundation, Logan, Utah | NTIS - PB 204 817 |
| 13030---11/71 | Research Needs for Irrigation Return Flow Quality Control; by Gaylord V. Skogerboe, Colorado State Univ., Ft. Collins, CO and J. P. Law, Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | GPO - $1.00 |
| 13030DYY06/69 | Water Quality Management Problems in Arid Regions; by Robert S. Kerr Water Research Center, FWQA, Ada, Oklahoma | NTIS - PB 198 125 |
| 13030ELY12/69 | Collected Papers Regarding Nitrates in Agricultural Waste Waters; by FWQA, San Francisco, CA; U.S. Bureau of Reclamation; and California Dept. of Water Resources | GPO - $1.50<br>NTIS - PB 197 595 |
| 13030ELY04/71-7 | Removal of Nitrate by an Algal System; by California Dept. of Water Resources, San Joaquin Valley, California | GPO - $1.25<br>NTIS - PB 205 425 |
| 13030ELY04/71-8 | Denitrification by Anaerobic Filters and Ponds; by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | GPO - 75¢ |
| 13030ELY05/71-12 | Desalination of Agricultural Tile Drainage; by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | (Under review) |
| 13030ELY05/71-3 | Nutrients from Tile Drainage Systems; by California Department of Water Resources | GPO - $1.00 |
| 13030ELY05/71-6 | Removal of Nitrogen from Tile Drainage - A Summary Report; by California Department of Water Resources and EPA | GPO - 50¢ |
| 13030ELY06/71-10 | Techniques to Reduce Nitrogen in Drainage Effluent During Transport; by U.S. Bureau of Reclamation, Region 2 | GPO - 60¢ |
| 13030ELY06/71-14 | Denitrification by Anaerobic Filters and Ponds - Phase II; by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | (Under review) |
| 13030ELY08/71-9 | The Effects of Agricultural Waste Water Treatment on Algal Bioassay Response; by EPA, San Francisco, CA | (Under review) |
| 13030GJS12/71 | National Irrigation Return Flow Research and Development Program; by J. P. Law, Jr., Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | GPO - 40¢<br>NTIS - PB 209 857 |

| Report Number | Title/Author | Source |
|---|---|---|
| **1304 - Animal Feed Lots** | | |
| 13040---07/68 | Pollution Implications of Animal Wastes - A Forward Oriented Review; by Dr. Raymond C. Loehr, Cornell Univ., Ithaca, New York | NTIS - PB 204 818 |
| 13040DEM01/71 | Characteristics of Wastes from Southwestern Cattle Feedlots; by Texas Tech. Univ., Lubbock, Texas | GPO - $1.00<br>NTIS - PB 209 214 |
| 13040DKP06/71 | Closed System Waste Management for Livestock; by Dr. P. O. Ngoddy, J. P. Harper, R. K. Collins, G. D. Wells, and F. A. Heidar, Michigan State Univ., East Lansing, Michigan | GPO - $1.25 |
| 13040EYX11/69 | Agricultural Practices and Water Quality; by Iowa State Univ., Ames, Iowa | NTIS - PB 199 828 |
| 13040FXG11/71 | Evaluation of Beef Cattle Feedlot Waste Management Alternatives; by A. F. Butchbaker, J. E. Garton, G. W. A. Mahoney, and M. D. Paine, Oklahoma State University, Stillwater, Oklahoma | GPO - $2.50 |
| | **Mining Pollution Control** | |
| **1401 - Mine Drainage** | | |
| 14010---06/70 | Oxygenation of Ferrous Iron; by Harvard University, Cambridge, Massachusetts | GPO - $1.75<br>NTIS - PB 189 233 |
| 14010DAY06/71 | Inorganic Sulfur Oxidation by Iron-Oxidizing Bacteria; by Syracuse Univ., Syracuse, New York | GPO - $1.25 |
| 14010DDH08/71 | Control of Mine Drainage from Coal Mine Mineral Wastes - Phase I - Hydrology and Related Experiments; by Truax-Traer Coal Company, Pinckneyville, Illinois | GPO - $1.25<br>NTIS - PB 206 194 |
| 14010DEE12/70 | Treatment of Acid Mine Drainage; by Horizons, Inc., Cleveland, Ohio | GPO - $1.00<br>NTIS - PB 197 470 |
| 14010DII05/71 | Rotary Precoat Filtration of Sludge from Acid Mine Drainage Neutralization; by Johns-Manville Products Corp., Manville, New Jersey | GPO - $1.25<br>NTIS - PB 203 190 |
| 14010DKN11/70 | Microbial Factor in Acid Mine Drainage Formation; by Mellon Institute, Carnegie-Mellon Univ., Pittsburgh, Pennsylvania | GPO - 70¢<br>NTIS - PB 196 113 |
| 14010DLC11/69 | Sulfide Treatment of Acid Mine Drainage; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania | NTIS - PB 187 866 |
| 14010DLI02/71 | Silicate Treatment for Acid Mine Drainage Prevention; by Tyco Laboratories, Inc., Waltham, Massachusetts | GPO - $1.00<br>NTIS - PB 198 427 |

| Report Number | Title/Author | Source |
|---|---|---|
| 14010DMO03/70-A | Investigative Mine Survey of a Small Watershed; by Halliburton Co., Duncan, Oklahoma | GPO - $2.00<br>NTIS - PB 196 110 |
| 14010DMO03/70 | New Mine Sealing Techniques for Water Pollution Abatement; by Halliburton Co., Duncan, Oklahoma | GPO - $1.50<br>NTIS - PB 196 736 |
| 14010DRB05/71 | Flocculation and Clarification of Mineral Suspensions; by University of Minnesota, Minneapolis, Minnesota | GPO - $1.25<br>NTIS - PB 206 238 |
| 14010DRZ02/71 | Purification of Mine Water by Freezing; by Applied Science Laboratories, Inc., State College, Pennsylvania | GPO - 70¢ |
| 14010DYG08/71 | Acid Mine Waste Treatment Using Reverse Osmosis; by Gulf Environmental Systems Company, San Diego, California | GPO - $1.00<br>NTIS - PB 202 228 |
| 14010DYH12/71 | Neutradesulfating Treatment Process for Acid Mine Drainage; by Catalytic, Inc., Philadelphia, Pennsylvania | GPO - $1.00 |
| 14010DYI02/71 | Evaluation of a New Acid Mine Drainage Treatment Process; by Black, Sivalls and Bryson, Inc., Pittsburgh, Pennsylvania | GPO - $1.50<br>NTIS - PB 202 571 |
| 14010DYK03/70 | Treatment of Acid Mine Drainage by Reverse Osmosis; by Rex Chainbelt, Inc., for the Commonwealth of Pennsylvania | GPO - 55¢<br>NTIS - PB 195 200 |
| 14010DZM08/70 | Feasibility Study of Mining Coal in an Oxygen Free Atmosphere; by Island Creek Coal Co., Holden, WV and Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, Pennsylvania | GPO - $1.50<br>NTIS - PB 197 446 |
| 14010ECC08/71 | The Effects of Various Gas Atmospheres on the Oxidation of Coal Mine Pyrites; by Cyrus Wm. Rice Div., NUS Corporation, Pittsburgh, Pennsylvania | GPO - $1.25<br>NTIS - PB 203 679 |
| 14010EFK06/72 | Use of Latex as a Soil Sealant to Control Acid Mine Drainage; by Uniroyal, Inc., Wayne, NJ | (At press) |
| 14010EGJ11/69 | Effects of Antibacterial Agents on Mine Drainage; by MSA Research Corp. and Pennsylvania Dept. of Mines and Mineral Industries | NTIS - PB 191 215 |
| 14010EHN04/71 | Detection of Abandoned Underground Coal Mines by Geophysical Methods; by HRB-Singer, Inc., State College, Pennsylvania | GPO - $1.00 |
| 14010EIZ01/70 | Limestone Treatment of Acid Mine Drainage; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania | GPO - $1.25<br>NTIS - PB 195 282 |
| 14010EIZ12/71 | Studies of Limestone Treatment of Acid Mine Drainage - Part II; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania | GPO - $1.25<br>NTIS - PB 208 326 |

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|---|---|---|
| 14010EJE12/71 | Mine Spoil Potentials for Water Quality and Controlled Erosion; by College of Agriculture and Forestry, West Virginia University, Morgantown, West Virginia | GPO - $1.75<br>NTIS - PB 208 817 |
| 14010EJT09/71 | Studies on Densification of Coal Mine Drainage Sludge; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania | GPO - $1.25<br>NTIS - PB 203 189 |
| 14010EMS09/69 | Bulk Transport of Waste Slurries to Inland and Ocean Disposal Sites - Vol. I; | NTIS - PB 189 757 |
| | " " " " - Vol. II; | NTIS - PB 189 758 |
| | " " " " - Vol. III; | NTIS - PB 189 759 |
| 14010EMS12/69 | " " " " - Summary; by Bechtel Corp., San Francisco, CA | NTIS - PB 189 756 |
| 14010ENW09/71 | Microbiological Treatment of Acid Mine Drainage Waters; by Continental Oil Co., Ponca City, Oklahoma | GPO - $1.00<br>NTIS - PB 206 231 |
| 14010ETV08/70 | Neutralization of High Ferric Iron Acid Mine Drainage; by Roger C. Wilmoth and Ronald D. Hill, FWQA, Cincinnati, Ohio | GPO - 50¢<br>NTIS - PB 192 087 |
| 14010EXA03/71 | Pilot Scale Study of Acid Mine Drainage; by Ohio State University, Columbus, Ohio | GPO - $1.00 |
| 14010FBZ09/71 | Concentrated Mine Drainage Disposal Into Sewage Treatment Systems; by Environmental Research & Applications, Inc., Wilton, CT | GPO - 75¢ |
| 14010FII03/71 | Evaluation of Pyritic Oxidation by Nuclear Methods; by Mellon Insti., Carnegie-Mellon University, Pittsburgh, Pennsylvania | GPO - 50¢<br>NTIS - PB 198 523 |
| 14010FJX12/71 | Dewatering of Mine Drainage Sludge; by Coal Research Bureau, West Virginia University, Morgantown, West Virginia | GPO - $1.00<br>NTIS - PB 208 347 |
| 14010FKK12/70 | Underground Coal Mining Methods to Abate Water Pollution; by West Virginia Univ., Morgantown, West Virginia | GPO - 60¢ |
| 14010FLW07/70 | Feasibility Study Manual - Mine Water Pollution Control Demonstrations; by FWQA, Washington, D.C. | GPO - 65¢<br>NTIS - PB 197 594 |
| 14010FMH12/70 | Treatment of Acid Mine Drainage by Ozone Oxidation; by Brookhaven National Laboratories, Associated Universities, Inc., Atomic Energy Commission, Upton, New York | GPO - $1.00<br>NTIS - PB 198 225 |
| 14010FNQ02/72 | Electrochemical Treatment of Acid Mine Waters; by Tyco Laboratories, Inc., Waltham, Massachusetts | GPO - $1.00<br>NTIS - PB 208 820 |
| 14010FOA02/71 | Carbonate Bonding of Coal Refuse; by Black, Sivalls and Bryson, Inc., Pittsburgh, PA | GPO - 60¢<br>NTIS - PB 198 230 |
| 14010FPR04/71 | Acid Mine Drainage Formation and Abatement; by Ohio State University Research Foundation, Columbus, Ohio | NTIS - PB 199 835 |

| Report Number | Title/Author | Source |
|---|---|---|
| 14010FPS02/70 | Sulfide to Sulfate Reaction Mechanism; by Ohio State University Research Foundation, Columbus, Ohio | GPO - $1.50 |
| 14010FQR03/72 | Reverse Osmosis Demineralization of Acid Mine Drainage; by The Ecology Division, Rex Chainbelt, Inc., Milwaukee, Wisconsin | GPO - $1.00 |
| 14010FUI10/71 | Foam Separation of Acid Mine Drainage; by Horizons, Inc., Cleveland, Ohio | GPO - 65¢<br>NTIS - PB 208 411 |
| 14010FYY09/71 | Study of Sulfur Recovery from Coal Refuse; by Black, Sivalls and Bryson, Inc., Pittsburgh, Pennsylvania | GPO - 70¢<br>NTIS - PB 203 488 |
| 14010FZU03/72 | Legal Problems of Coal Mine Reclamation; by University of Maryland School of Law, Baltimore, Maryland | GPO - $2.00<br>NTIS - PB 209 862 |
| 14010HBQ09/71 | Feasibility Study Upper Meander Creek Mine Drainage Abatement Project; by Stanley Consultants, Cleveland, Ohio | GPO - 60¢<br>NTIS - PB 206 232 |
| 1403 - Oil Shale | | |
| 14030EDB12/71 | Water Pollution Potential of Spent Oil Shale Residues; by Colorado State Univ., Fort Collins, Colorado | GPO - $1.25<br>NTIS - PB 206 808 |
| 1405 - Phosphate Mining | | |
| 14050EPU08/71 | Utilization of Phosphate Slime; by International Minerals & Chemical Corporation, Skokie, Illinois | GPO - $1.25<br>NTIS - PB 203 191 |
| | Other Sources of Pollution Control | |
| 1501 - Recreation | | |
| 15010---01/69 | Basic Waste Characteristics at Winter Recreation Areas; by B. D. Clark, Pacific Northwest Laboratory, FWPCA, Corvallis, OR | NTIS - PB 208 437 |
| 15010---03/70 | Working Paper No. 68 - Evaluation of Extended Aeration Treatment at Recreation Areas; by B. D. Clark, Pacific Northwest Laboratory, FWPCA, Corvallis, Oregon | NTIS - PB 208 436 |
| 1502 - Watercraft Wastes | | |
| 15020---06/67 | Houseboat Wastes; Methods for Collection and Treatment; by B. D. Clark, Pacific Northwest Water Laboratory, FWPCA, Corvallis, Oregon | NTIS - PB 208 439 |

| Report Number | Title/Author | Source |
|---|---|---|
| 15020---04/68 | Houseboat Waste Characteristics and Treatment; by B. D. Clark, Pacific Northwest Water Laboratory, FWPCA, Corvallis, Oregon | NTIS - PB 208 438 |
| 15020DGR08/70 | Flexible Holding Tank for Pleasurecraft Sanitary System; by Uniroyal, Inc., Wayne, New Jersey | GPO - 55¢<br>NTIS - PB 201 700 |
| 15020DHB04/70 | Storage of Wastes from Watercraft and Disposal at Shore Facilities; by General Dynamics Electric Boat Div., Groton, CT | GPO - $1.00 |
| 15020DHE09/69 | Collection, Underwater Storage, and Disposal of Pleasurecraft Wastes; by Underwater Storage, Inc., and Silver Schwartz, Ltd., Washington, D.C. | NTIS - PB 188 505 |
| 15020DHG09/71 | Watercraft Waste Treatment System Development and Demonstration Report; by General Electric Company, Philadelphia, PA | GPO - $1.25<br>NTIS - PB 208 345 |
| 15020ENN09/71 | Control of Pollution from Outboard Engine Exhaust; A Reconnaissance Study; by Rensselaer Polytechnic Institute, Troy, NY | GPO - 50¢<br>NTIS - PB 206 192 |
| **1503 - Construction** | | |
| 15030DTL05/70 | Urban Soil Erosion and Sediment Control; by National Association of Counties Research Foundation, Washington, D.C. | GPO - $1.00<br>NTIS - PB 196 111 |
| **1504 - Impoundments** | | |
| 15040EJZ12/70 | Selective Withdrawal from a Stratified Reservoir; by University of California, Berkeley, California | GPO - $1.00<br>NTIS - PB 201 726 |
| **1508 - Oil Spills** | | |
| 15080---03/69 | Chemical Treatment of Oil Slicks; by Edison Water Quality Lab., FWQA, Edison New Jersey | NTIS - PB 185 947 |
| 15080---10/70 | Oil Containment Systems; by Edison Water Quality Lab., FWQA, Edison, New Jersey | NTIS - PB 206 797 |
| 15080DBO03/71 | Conversion of Crankcase Waste Oil into Useful Products; by National Oil Recovery Corporation, Bayonne, New Jersey | GPO - $1.00<br>NTIS - PB 205 207 |
| 15080DJM07/70 | Recovery of Oil Spills Using Vortex Assisted Airlift System; by Battelle Memorial Institute, Richland, Washington | GPO - 50¢<br>NTIS - PB 203 489 |
| 15080DJN01/71 | Gelling Crude Oils to Reduce Marine Pollution From Tanker Oil Spills; by Western Co. of North America, Richardson, Texas | GPO - $1.25<br>NTIS - PB 202 239 |

| Report Number | Title/Author | Source |
|---|---|---|
| 15080DJO10/69 | Oil Tagging System Study - Summary; by Melpar, Inc., Arlington, Virginia | NTIS - PB 190 193 |
| 15080DJO05/70 | Oil Tagging System Study - Final Report; by Melpar, Inc., Arlington, Virginia | GPO - $1.50<br>NTIS - PB 195 283 |
| 15080DJP10/70 | Oil/Water Separation System with Sea Skimmer; by The Garrett Corp., AiResearch Manufacturing Div., Los Angeles, Calif. | GPO - $1.50 |
| 15080DJQ04/70 | Ultrasonic Emulsification of Oil Tanker Cargo; by Sonics International, Inc., Dallas, Texas | NTIS - PB 193 674 |
| 15080DOZ12/70 | Testing and Evaluation of Oil Spill Recovery Equipment; by Maine Port Authority, Portland, Maine | GPO - $1.50<br>NTIS - PB 200 081 |
| 15080DXE11/70 | Feasibility Analysis of Incinerator Systems for Restoration of Oil Contaminated Beaches; by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, California | GPO - 75¢<br>NTIS - PB 198 227 |
| 15080DZR11/70 | Santa Barbara Oil Pollution, 1969; by University of California, Santa Barbara, California | GPO - 55¢<br>NTIS - PB 197 670 |
| 15080EAG07/69 | Review of Santa Barbara Channel Oil Pollution Incident; by Pacific NW Laboratories, Battelle Memorial Institute, Richland, WA | NTIS - PB 191 712 |
| 15080EAL02/71 | Santa Barbara Oil Spill: Short-term Analysis of Macroplankton and Fish; by University of California, Santa Barbara, California | GPO - 70¢ |
| 15080EBZ12/70 | Effects of Oil Pollution on Waterfowl: A Study of Salvage Methods; by Zoological Society of San Diego, California | GPO - 50¢<br>NTIS - PB 198 091 |
| 15080EHO05/69 | Oil Dispersing Chemicals; by M. Poliakoff, for the Edison Water Quality Laboratory, FWQA, Edison, New Jersey | NTIS - PB 188 207 |
| 15080EIL12/69 | Proceedin[illegible] Joint Conference on Prevention and Control of Oil Spills; sponsored by the American Petroleum Institute and the Federal Water Quality Administration | NTIS - PB 194 395 |
| 15080EOS03/70 | Preliminary Operations Planning Manual for the Restoration of Oil-Contaminated Beaches; by URS Research Company, San Mateo, Calif. | NTIS - PB 191 711 |
| 15080EOS10/70-1 | Evaluation of Selected Earthmoving Equipment for the Restoration of Oil-Contaminated Beaches; by URS Research Co., San Mateo, CA | GPO - $1.50<br>NTIS - PB 206 693 |
| 15080EPL04/70 | Spreading and Movement of Oil Spills; by H. G. Schwartzberg, New York University, New York, NY | NTIS - PB 192 852 |
| 15080EUU10/70 | Vortex Separation Process for Oil Spill Recovery Systems; by American Process Equipment Corp., Panama City, Florida | GPO - 60¢<br>NTIS - PB 201 656 |

| Report Number | Title/Author | Source |
|---|---|---|
| 15080FHS08/69 | Cleaning Oil-Contaminated Beaches; by Northeast Region Research & Development Program, FWQA, Edison, New Jersey | NTIS - PB 189 172 |
| 15080FHT12/69 | Oil Sampling Techniques; by Edison Water Quality Lab., FWQA, Edison, New Jersey | NTIS - PB 190 171 |
| 15080FHU10/69 | Biological Effects of Oil Pollution - Bibliography; by Edison Water Quality Laboratory, FWQA, Edison, New Jersey | NTIS - PB 188 206 |
| 15080FTU05/71 | Oil Pollution Incident, Platform Charlie, Main Pass Block 41 Field, Louisiana; by Alpine Geophysical Associates, Inc., Norwood, NJ | GPO - $1.25<br>NTIS - PB 203 497 |
| 15080FWN07/71 | Recovery of Floating Oil Rotating Disk Type Skimmer; by Atlantic Research Systems Div., The Susquehanna Corp., Costa Mesa, Calif. | GPO - $1.25<br>NTIS - PB 205 208 |
| 15080FWO02/71 | Floating Oil Recovery Devices; by New Mexico State University, Las Cruces, NM | GPO - $1.00 |
| 15080FWP04/71 | Concept Development of a Hydraulic Skimmer System for Recovery of Floating Oil; by Battelle Memorial Institute, Richland, Washington | GPO - $1.25<br>NTIS - PB 203 498 |
| 15080HOL01/72 | A Feasibility Demonstration of an Aerial Surveillance Spill Prevention System; by R. I. Welch, A. D. Marmelstein, and P. M. Maughan, Earth Satellite Corp., Washington, D.C. | (At press) |

1509 - Hazardous Material Spills

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|---|---|---|
| 15090FOZ10/70 | Control of Spillage of Hazardous Polluting Substances; by Battelle Memorial Institute, Pacific NW Laboratories, Richland, WA | GPO - $3.00<br>NTIS - PB 197 596 |

## Water Quality Control

1601 - Eutrophication

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|---|---|---|
| 16010---10/67 | Environmental Requirements of Blue-Green Algae (Proceedings of Symposium); by Univ. of Washington, Seattle, WA and Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 206 538 |
| 16010---10/69 | Working Paper No. 66; Field Studies on Sediment - Water Algal Nutrient Interchange Processes and Water Quality of Upper Klamath and Agency Lakes; by A. R. Gahler, Pacific NW Water Lab., FWPCA, Corvallis, OR | NTIS - PB 207 643 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16010---10/69 | Plankton Community and Hydraulic Characterization Preliminary to Lake Flushing; by University of Washington, Seattle, WA | NTIS - PB 192 760 |
| 16010---03/71 | Demonstrating the Effects of Nutrients in Bio-oxidation Pond Receiving Streams; by University of Oklahoma, Norman, Oklahoma | NTIS - PB 199 269 |
| 16010DDS03/70 | Dynamics of the Nitrogen Cycle in Lakes; by University of Alaska, College, Alaska | NTIS - PB 203 791 |
| 16010DMG12/71 | Flushing of Small Shallow Lakes; by C. C. Lomax, and J. F. Orsborn, Washington State University, Pullman, Washington | GPO - 50¢ |
| 16010DNY07/71 | Eutrophication of Surface Waters - Lake Tahoe Indian Creek Reservoir; by Lake Tahoe Area Council, South Lake Tahoe, CA | GPO - $1.25 |
| 16010DON02/72 | Eutrophication Factors in North Central Florida Lakes; by H. D. Putnam, P. L. Brezonik and E. E. Shannon, Environmental Engineering Dept., Univ. of Florida, Gainesville, Florida | GPO - $1.25<br>NTIS - PB 209 863 |
| 16010DOU06/70 | Pharmacological Testing of Blue-Green Algae for Constituents Having Therapeutic Value; by World Life Research Institute, Colton, California | GPO - 30¢<br>NTIS - PB 206 476 |
| 16010DQB10/71 | Provisional Algal Assay Procedures; by D. F. Toerien, et al., Univ. of California, Berkeley, California | NTIS - PB 206 140 |
| 16010DSW05/71 | Eutrophication of Surface Waters - Lake Tahoe; by Lake Tahoe Area Council, South Lake Tahoe, California | GPO - $1.25 |
| 16010DXV11/71 | The Carbon Dioxide System and Eutrophication; by S. D. Morton, P. H. Derse, and R. C. Sernau, Warf Institute, Inc., Madison, Wisconsin | GPO - 75¢ |
| 16010EHC12/71 | Eutrophication in Coastal Waters: Nitrogen as a Controlling Factor; by Scripps Institute of Oceanography, University of California, San Diego, La Jolla, California | GPO - 70¢ |
| 16010EHR03/71 | The Chemical Investigation of Recent Lake Sediments from Wisconsin Lakes and Their Interpretation; by G. C. Bortleson, Univ. of Wisconsin, Madison, Wisconsin | GPO - $2.25<br>NTIS - PB 208 965 |
| 16010EHR08/71 | Nutrient Sources for Algae and Their Control; by Dr. G. P. Fitzgerald, Univ. of Wisconsin Water Resources Center, Madison, Wisconsin | GPO - $1.00 |
| 16010EHR12/71 | Problem Lakes in the United States; by Martha J. Ketelle and Paul D. Uttormark, Water Resources Center, University of Wisconsin, Madison, Wisconsin | GPO - $2.00<br>NTIS - PB 209 864 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16010EHR03/72 | Role of Bacteria in the Nitrogen Cycle in Lakes; by E. F. McCoy, University of Wisconsin, Madison, Wisconsin | GPO - 35¢ |
| 16010EQA10/71 | Dissolved and Particulate Organic Carbon in Some Colorado Waters; by E. B. Reed, Dept. of Zoology, Colorado State University, Fort Collins, Colorado | GPO - $1.00 |
| 16010EXE12/71 | The Effects of Artificial Aeration on Lake Ecology; by A. W. Fast, Michigan State University, East Lansing, Michigan | GPO - $4.25 |

1602 - Physical - Chemical Identification of Pollutants

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|---|---|---|
| 16020---10/67 | Iron-59 as a Solids Tracer in Aqueous Suspensions; by M. R. Scalf, J. L. Witherow, and C. P. Priesing, Robert S. Kerr Water Research Center, FWPCA, Ada, Oklahoma | NTIS - PB 205 827 |
| 16020---07/71 | Methods for Chemical Analysis of Water and Wastes, 1971; by Analytical Quality Control Lab., EPA, Cincinnati, Ohio | GPO - $3.00 |
| 16020DHV07/70 | Aquatic Plant Chemistry. Its Application to Water Pollution Control; by R.T. LaLonde, State Univ. College of Forestry at Syracuse Univeriscy, Syracuse, New York | NTIS - PB 192 810 |
| 16020DKW09/70 | Chemical Characteristics of Organic Color in Water; by University of Washington, Seattle, Washington | NTIS - PB 199 707 |
| 16020EWC04/71 | Catalog of Pesticide NMR Spectra; by Southeast Water Lab., EPA, Athens, Georgia | GPO - $1.50<br>NTIS - PB 206 144 |
| 16020FEN03/71 | Characterization and Separation of Secondary Effluent Components by Molecular Weight; by Arthur D. Little, Inc., Cambridge, Mass. | GPO - 55¢<br>NTIS - PB 206 193 |
| 16020FQT12/70 | Fluid Product Pipeline Leak Detection from Airborne Platforms; by Resources Technology Corporation, Houston, Texas | GPO - $1.00 |
| 16020FSO06/71 | Design and Operation of an Information Center on Analytical Methodology; by Battelle Memorial Institute, Columbus, OH | GPO - $1.25<br>NTIS - PB 204 820 |
| 16020GAG02/71 | Sampling of Glacial Snow for Pesticide Analysis; by T. R. Stengle, University of Mass., Amherst, Mass., J. J. Lichtenberg, Analytical Quality Control Lab., EPA, Cincinnati, Ohio and C. S. Houston, Univ. of Vermont, Burlington, VT | GPO - 35¢ |
| 16020GDQ10/71 | A Microbiological Survey in Lake Erie Near Cleveland, Ohio; by R. P. Collins, Univ. of Connecticut, Storrs, Connecticut | GPO - 50¢ |

| Report Number | Title/Author | Source |
|---|---|---|
| 16020GFR07/71 | Interaction of Nitrilotriacetic Acid With Suspended and Bottom Material; by National Bureau of Standards, Washington, D.C. | GPO - 45¢ |
| 16020GLY05/71 | Monitoring Mercury Vapor Near Pollution Sites; by Environmental Measurements, Inc., San Francisco, California | GPO - 70¢ |
| **1603 - Biological Identification of Pollutants** | | |
| 16030DNL01/72 | Aquatic and Wetland Plants of Southwestern United States; by Dr. Donovan Corrall, Washington, D.C. (formerly with Texas Research Foundation) | (At press) |
| 16030DQH11/70 | Mayfly Distribution as a Water Quality Index; by Winona State College, Winona, MN | GPO - 50¢<br>NTIS - PB 198 223 |
| **1604 - Sources of Pollutants** | | |
| 16040DGH08/71 | Characterization of Taste and Odors in Water Supplies; by Ralph P. Collins, Univ. of Connecticut, Storrs, Connecticut | GPO - 35¢ |
| 16040ELO06/70 | Investigation of Means for Controlled Self-Destruction of Pesticides; by Aerojet-General Corp., El Monte, Calif. | GPO - $1.25<br>NTIS - PB 198 224 |
| **1605 - Fate of Pollutants in Fresh Surface Waters** | | |
| 16050---04/67 | The Components of Oxygenation of Flowing Streams; by F. S. Stay, Jr., W. R. Duffer, B. L. DePrater, and J. W. Keeley, Robert S. Kerr Water Research Center, FWPCA, Ada, Oklahoma | NTIS - PB 205 826 |
| 16050DJK08/70 | Dynamic Model Study of Lake Erie:<br>Part I: Similitude Criteria and Experimental Set-up;<br>Part II: Analytical and Experimental Results;<br>by Ralph R. Rumer, Jr., State University of New York at Buffalo | NTIS - PB 195 544<br>NTIS - PB 195 545 |
| 16050DOW10/71 | Multidirectional Turbulence Probe Development - Phase I: Unidirectional Turbulence Sensor Development; by Battelle Columbus Laboratories, Columbus, Ohio | GPO - 65¢ |
| 16050DXN07/70 | Development of Immobilized Enzyme Systems for Enhancement of Biological Waste Treatment Processes; by Grumman Aerospace Corp., Bethpage, New York | GPO - 70¢<br>NTIS - PB 203 598 |
| 16050EMF06/71 | A Quick Biochemical Oxygen Demand Test; by University of California, Davis, Calif. | GPO - 60¢ |

| Report Number | Title/Author | Source |
|---|---|---|
| 16050EQS12/71 | Enteric Bacterial Degradation of Stream Detritus; by Dr. C. W. Hendricks, Univ. of Georgia, Athens, Georgia | GPO - $1.00 |
| 16050ERS08/71 | Deposition of Fine Sediments in Turbulent Flows; by E. Partheniades and A. J. Mehta, Dept. of Coastal and Oceanographic Engr., Univ. of Florida, Gainesville, FL | (At press) |
| 16050EYT06/71 | Pesticide Inputs and Levels Minnesota Waters - Lake Superior Basin; by Minnesota Pollution Control Agency, Minneapolis, MN | GPO - $1.00 |
| 16050FGS07/70 | The Interrelation of Carbon and Phosphorus in Regulating Heterotrophic and Autotrophic Populations in Aquatic Ecosystems; by P. Kerr, et al., Southeast Water Lab., FWQA, Athens, Georgia | GPO - 60¢<br>NTIS - PB 195 195 |
| 16050FOR01/72 | Symposium on Direct Tracer Measurement of the Reaeration Capacity of Streams and Estuaries; sponsored by Georgia Institute of Technology, Atlanta, Georgia and EPA | GPO - $1.00 |

1606 - Fate of Pollutants in Gound Water

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|---|---|---|
| 16060---03/67 | Moisture Movement in a Horizontal Soil Column Under the Influence of an Applied Pressure; by Wm. W-G Yeh, Stanford Univ., Stanford, California | NTIS - PB 205 443 |
| 16060---06/70 | Determination of Pollutional Potential of the Ogallala Aquifer by Salt Water Injection; by Robert S. Kerr Water Research Center, FWQA, Ada, Oklahoma | NTIS - PB 202 227 |
| 16060DCO10/70 | Potential Pollution of the Ogallala by Recharging Playa Lake Water - Pesticides; by D. Wells, E. Huddleston, and R. Rekers, Texas Tech University, Lubbock, Texas | GPO - 40¢<br>NTIS - PB 208 813 |
| 16060DDZ07/71 | Study of Reutilization of Wastewater Recycled Through Groundwater, Vol. I; by D. F. Boen, J. H. Bunts, Jr., and R. J. Currie, Eastern Municipal Water District, Hemet, California | GPO - $1.50<br>NTIS - PB 209 859 |
| 16060DDZ07/71 | Study of Reutilization of Wastewater Recycled Through Groundwater, Vol. II; by D. F. Boen, J. H. Bunts, Jr., and R. J. Currie, Eastern Municipal Water District, Hemet, California | GPO - $1.25 |
| 16060DLL09/70 | Dispersion in Heterogeneous Nonuniform Anisotropic Porous Media; by Purdue Univ., Lafayette, Indiana | GPO - $1.00<br>NTIS - PB 200 258 |
| 16060DMP03/71 | Interaction of Herbicides and Soil Microorganisms; by Boyce Thompson Institute for Plant Research, Inc., Yonkers, New York | GPO - 75¢ |

| Report Number | Title/Author | Source |
|---|---|---|
| 16060DOE04/72 | Nitrate in the Unsaturated Zone Under Agricultural Lands; by P. F. Pratt, Univ. of California, Riverside, California | GPO - 55¢ |
| 16060DRV03/72 | Renovating Secondary Sewage by Ground Water Recharge with Infiltration Basins; by H. Bouwer, R. C. Rice, and E. D. Escarcega, U. S. Water Conservation Lab., Dept. of Agriculture, Phoenix, AZ, and M. S. Riggs, Salt River Project, Phoenix, Arizona | GPO - $1.00 |
| 16060EGS01/71 | Infiltration Rates and Groundwater Quality Beneath Cattle Feedlots, Texas High Plains; by Texas Tech. Univ., Lubbock, Texas | GPO - 65¢<br>NTIS - PB 203 681 |
| 16060ELJ03/72 | Density Induced Mixing in Confined Aquifers; by L. W. Gelhar, J. L. Wilson, J. S. Miller, and J. M. Hamrick, Ralph M. Parsons Lab. for Water Resources and Hydrodynamics, Massachusetts Institute of Technology, Cambridge, MA | GPO - $1.25 |
| 16060ERU12/71 | Ground Water Pollution in Arizona, California, Nevada, and Utah; by D. K. Fuhriman and J. R. Barton; Fuhriman, Barton and Associates, Provo, UT | GPO - $2.00 |
| 16060GHR11/71 | Investigations Concerning Probable Impact of Nitrilotriacetic Acid on Ground Water; by W. J. Dunlap, R. L. Cosby, J. F. McNabb, B. E. Bledsoe, and M. R. Scalf, Robert S. Kerr Water Research Center, EPA, Ada, OK | GPO - 60¢<br>NTIS - PB 208 433 |
| 16060GRB08/71 | The National Ground Water Quality Symposium; by The National Water Well Association, Columbus, Ohio, and EPA | GPO - $1.75 |
| 16060HIJ02/72 | Evaluation of Salt Water Disposal Into Potential Ground-Water Resources; by F. A. Norris, Oklahoma Corp. Commission, Oklahoma City, OK | GPO - 35¢ |

1607 - Fate of Pollutants in Marine Waters

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|---|---|---|
| 16070---10/66 | Environmental Factors in Coastal and Estuarine Waters, Bibliographic Series, Vol. I, Coast of Oregon; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 202 878 |
| 16070---09/67 | Index to Research - Coastal and Estuarine Waters in the United States; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 206 543 |
| 16070---08/68 | Environmental Factors in Coastal and Estuarine Waters, Bibliographic Series, Vol. II, Coast of Washington; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 202 879 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16070---12/69 | Working Paper No. 64; Disposal of Solid Aluminum Process Wastes in the Ocean; by D. J. Baumgartner, et al., Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 210 110 |
| 16070---03/70 | Working Paper No. 70; Salinity Runoff and Wind Measurements, Yaquina Estuary, Oregon; by R. J. Callaway, et al., Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 210 112 ($4. |
| 16070---04/70 | Working Paper No. 71; Design and Construction of a Saltwater Environment Simulator; by W. A. DeBen, Pacific Northwest Water Lab., FWQA, Corvallis, OR | NTIS - PB 210 111 ($4. |
| 16070---07/70 | Working Paper No. 78; Trace Materials in Wastes Disposal to Coastal Waters; Fates, Mechanisms, and Ecological Guidance and Control; by Milton H. Feldman, Pacific Northwest Water Lab., FWQA, Corvallis, OR | NTIS - PB 202 346 |
| 16070---09/70 | Working Paper No. 76; Summary of the Oceanography and Surface Wind Structure of the Pacific Subarctic Region in Relation to Waste Releases at Sea; by R. J. Callaway, Pacific Northwest Water Lab., FWQA, Corvallis, OR | NTIS - PB 204 739 |
| 16070---10/70 | Working Paper No. 77; The 50-Mile Ballast-Oil Dumping Prohibited Zone Off Alaska, Reconsidered in the Light of Available Data Gleaned from Significant Incidents; by M. H. Feldman, Pacific Northwest Water Lab., FWQA, Corvallis, OR | NTIS - PB 204 740 |
| 16070DBH11/69 | Mathematical Model of the Columbia River from the Pacific Ocean to Bonneville Dam, Part I; by R. J. Callaway, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR | NTIS - PB 202 422 |
| 16070DBH04/70 | Ocean Outfall Design; Part I - Literature Review and Theoretical Development; by D. J. Baumgartner, D. S. Trent, Pacific Northwest Water Lab., FWQA, Corvallis, OR | NTIS - PB 203 749 |
| 16070DBH04/71 | Mathematical Model of the Columbia River from the Pacific Ocean to Bonneville Dam, Part II; by R. J. Callaway, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR | NTIS - PB 202 423 |
| 16070DCD09/70 | The Oxygen Uptake Demand of Resuspended Bottom Sediments; by Seattle University, Seattle, WA | GPO - 50¢ |
| 16070DUF11/70 | Waste Management Concepts for the Coastal Zone; by National Academy of Science - National Academy of Engineering, Washington, D.C. | NTIS - PB 195 861 |
| 16070DZV02/71 | Estuarine Modeling; An Assessment; edited by G. H. Ward, Jr., Tracor, Inc., Austin, TX | GPO - $4.50<br>NTIS - PB 206 807 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16070EFG12/71 | Limitations and Effects of Waste Disposal on an Ocean Shelf; by Florida Ocean Sciences Institute, Deerfield Beach, FL | GPO - $2.25 |
| 16070ENS06/71 | Airphoto Analysis of Ocean Outfall Dispersion; by Oregon State University, Corvallis, OR | GPO - $2.25 |
| 16070EOK07/71 | Oceanography of the Nearshore Coastal Waters of the Pacific Northwest Relating to Possible Pollution, Vol. I; by Oregon State University, Corvallis, OR | GPO - $5.25 |
| 16070EOK07/71 | Oceanography of the Nearshore Coastal Waters of the Pacific Northwest Relating to Possible Pollution, Vol. II; by Oregon State University, Corvallis, OR | GPO - $6.00 |
| 16070FGY07/71 | The Barged Ocean Disposal of Wastes: A Review of Current Practice and Methods of Evaluation; by B. D. Clark, W. F. Rittall, D. J. Baumgartner, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR | NTIS - PB 204 868 |
| 16070GHV05/71 | Working Paper No. 80: User's Guide and Documentation for Outfall Plume Model; by D. J. Baumgartner, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR | NTIS - PB 204 577 |

1608 - Water Quality Control

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|---|---|---|
| 16080---00/68 | Pilot Study of Dynamics of Reservoir Destratification; by L. E. Leach, W. R. Duffer, and C. C. Harlin, Jr., Robert S. Kerr Water Research Center, FWPCA, Ada, OK | NTIS - PB 205 825 |
| 16080---01/68 | Agricultural Utilization of Sewage Effluent and Sludge: An Annotated Bibliography; by J. P. Law, Robert S. Kerr Water Research Center, FWPCA, Ada, OK | GPO - 45¢<br>NTIS - PB 205 028 |
| 16080---06/69 | Hydraulic and Mixing Characteristics of Suction Manifolds; by Univ. of Washington, Seattle, WA | NTIS - PB 190 800 |
| 16080---10/69 | Nutrient Removal from Enriched Waste Effluent by the Hydroponic Culture of Cool Season Grasses; by James P. Law, Robert S. Kerr Water Research Center, Ada, OK | GPO - 50¢<br>NTIS - PB 196 112 |
| 16080---11/69 | Nutrient Removal from Cannery Wastes by Spray Irrigation of Grassland; by J. P. Law, et al., Robert S. Kerr Water Research Center, Ada, OK | NTIS - PB 189 774 |
| 16080---10/70 | Induced Hypolimnion Aeration for Water Quality Improvement of Power Releases; by L. E. Leach, et al., Robert S. Kerr Water Research Center, EPA, Ada, OK | GPO - 50¢<br>NTIS - PB 198 226 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16080---11/70 | Induced Aeration of Small Mountain Lakes; by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma | GPO - 65¢ |
| 16080DFO01/71 | Water Quality Control Through Flow Augmentation; by Heidelberg College, Tiffin, OH | GPO - $1.50<br>NTIS - PB 206 473 |
| 16080DOO07/70 | Optimum Mechanical Aeration Systems for Rivers and Ponds; by Littleton Research and Engineering Corp., Littleton, MA | GPO - $1.25<br>NTIS - PB 206 218 |
| 16080DRX10/69 | Stratified Reservoir Currents; by Oregon State University, Corvallis, OR | NTIS - PB 193 026 |
| 16080DUP12/70 | Oxygen Regeneration of Polluted Rivers; The Delaware River; by Rutgers Univ., New Brunswick, NJ | GPO - $1.00<br>NTIS - PB 201 649 |
| 16080DVF12/70 | Development of Phosphate-free Home Laundry Detergents; by IIT Research Institute, Chicago, IL | GPO - $1.00<br>NTIS - PB 198 222 |
| 16080DVF02/72 | Technical Evaluation of Phosphate-free Home Laundry Detergents; by H. G. Reilich, IIT Research Institute, Chicago, IL | GPO - $1.25 |
| 16080DWP11/70 | Induced Air Mixing of Large Bodies of Polluted Water; by University of Maine, Orono, ME | GPO - 60¢<br>NTIS - PB 198 220 |
| 16080FSN10/71 | Engineering Methodology for River and Stream Reaeration; by JBF Scientific Corp., Burlington, MA | GPO - $1.25<br>NTIS - PB 208 818 |
| 16080FYA03/71 | Oxygen Regeneration of Polluted Rivers; The Passaic River; by Rutgers University, New Brunswick, NJ | GPO - 65¢<br>NTIS - PB 206 190 |
| 16080GGH08/71 | Changes in Water Quality Resulting From Impoundment; by W. R. Duffer and C. C. Harlin, Jr., Robert S. Kerr Water Research Center, EPA, Ada, OK | GPO - $1.25 |
| 16080GGP07/71 | Effects of Feedlot Runoff on Water Quality of Impoundments; by W. R. Duffer, R. D. Kreis, and C. C. Harling, Jr., Robert S. Kerr Water Research Center, EPA, Ada, OK | GPO - 65¢ |
| 16080GPF03/71 | Corrosion Potential of NTA in Detergent Formulations; by Battelle Columbus Lab., Columbus, OH | GPO - $1.00 |
| 16080GWF02/72 | Soil Systems for Municipal Effluents -- A Workshop and Selected References; by R. H. Ramsey, C. R. Wetherill and H. C. Duffer, East Central State College, Ada, OK | GPO - 65¢ |

| Report Number | Title/Author | Source |
|---|---|---|
| 16080HTD03/72 | Mercury Pollution Control in Stream and Lake Sediments; by J. D. Suggs, D. H. Peterson, and J. B. Middlebrook, Jr., Advanced Technology Center, Inc., Dallas, TX | GPO - 50¢ |
| 16080HTZ05/72 | Polymer Film Overlay System for Mercury Contaminated Sludge - Phase I; by M. M. Epstein and M. U. Widman, Battelle Columbus Lab., Columbus, OH | (At press) |
| 16080HUB04/72 | Waste Wool as a Scavenger for Mercury Pollution in Waters; by J. P. Tratnyek, Arthur D. Little, Inc., Cambridge, MA | GPO - 60¢ |
| 16080HVA01/72 | Sand and Gravel Overlay for Control of Mercury in Sediments; by L. H. Bongers and M. N. Khattak, Research Institute for Advanced Studies, Martin Marietta Corp., Baltimore, MD | GPO - 55¢ |

1609 - Water Resources Data

| | | |
|---|---|---|
| 16090---07/69 | Use of Mathematical Models in Water Quality Control Studies; by Northeastern University, Boston, MA | NTIS - PB 188 494 |
| 16090DBJ08/70 | Design of Water Quality Surveillance Systems; by Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, PA | GPO - $3.00<br>NTIS - PB 195 675 |
| 16090DBX04/70 | Evaluation of Dispersed Pollutional Loads from Urban Areas; by University of Oklahoma, Norman, OK | NTIS - PB 203 746 |
| 16090DCL05/70 | Delaware Estuary and Bay Water Quality Sampling and Mathematical Model Project; by the Delaware River Basin Commission, Trenton, NJ | NTIS - PB 193 799 |
| 16090DEA12/69 | Complementary-Competitive Aspects of Water Storage; by Sacramento State College Foundation, Sacramento, CA | NTIS - PB 190 197 |
| 16090DLU11/69 | Economic Evaluation of Water Quality; by University of California, Berkeley, CA | NTIS - PB 189 169 |
| 16090DQZ06/71 | Research Supplement to Journal Water Pollution Control Federation; by the Water Pollution Control Federation, Washington, D.C. | GPO - 45¢ |
| 16090DRM09/69 | A Model for Quantifying Flow Augmentation Benefits; by University of Florida, Gainesville, FL | NTIS - PB 188 208 |
| 16090DUH02/71 | Stochastic Modeling for Water Quality Management; by Stochastics, Inc., Blacksburg, VA | GPO - $3.00<br>NTIS - PB 203 427 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16090DVU07/70 | Computer Simulation of the Hydrologic-Salinity Flow System Within the Upper Colorado River Basin; by Utah State Univ., Logan, UT | NTIS - PB 203 674 |
| 16090DWR06/70 | Development of a Hydro-Quality Simulation Model; by Utah Research Lab., Utah State University, Logan, UT | NTIS - PB 194 065 |
| 16090FPW03/70 | Legal Aspects of Water Storage for Flow Augmentation; by Virginia Polytechnic Institute, Blacksburg, VA | GPO - $1.75<br>NTIS - PB 195 170 |

1610 - Cold Climate Research

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|---|---|---|
| 16100---06/70 | Biological Waste Treatment in the Far North; by FWQA, Alaska Water Lab., College, AK | NTIS - PB 195 673 |
| 16100---10/70 | The Chena River - A Study of a Subartic Stream; by Alaska Water Lab., FWQA, College, AK | NTIS - PB 197 857 |
| 16100EXH11/71 | International Symposium on Water Pollution Control in Cold Climates; by Univ. of Alaska, College, AK | GPO - $2.50 |
| 16100GOI09/71 | Environmental Guidelines for Road Construction in Alaska; by F. B. Lotspeich, Alaska Water Lab., EPA, College, AK | NTIS - PB 206 155 |

1611 - Water Resources Planning

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|---|---|---|
| 16110DAJ12/70 | Benefits of Water Quality Enhancement; by Syracuse University, Syracuse, NY | GPO - $1.75<br>NTIS - PB 207 358 |
| 16110DTF02/71 | The Economics of Water Supply and Quality; by Harvard University, Cambridge, MA | GPO - 50¢<br>NTIS - PB 202 698 |
| 16110EAX02/72 | Basin Management for Water Reuse; by Alamo Area Council of Governments, San Antonio, TX | GPO - $2.25<br>NTIS - PB 209 932 |
| 16110EGQ04/72 | Extensions of Mathematical Programming for Regional Water Quality Management; by Univ. of California, Los Angeles, CA | GPO - $1.00 |
| 16110EXW06/71 | Factors Affecting Pollution Referenda; by ABT Associates, Inc., Cambridge, MA | GPO - $2.50<br>NTIS - PB 207 350 |
| 16110FIO01/72 | Use of General Equilibrium in Regional Water Resource Planning; by Georgetown University, Washington, D.C. | GPO - $1.50<br>NTIS - PB 209 893 |
| 16110FPP11/71 | Interstate Planning for Regional Water Supply and Pollution Control; by Delaware River Basin Commission, Trenton, NJ | GPO - $3.00 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16110FPX08/70 | Mathematical Programming for Regional Water Quality Management; by Univ. of California Los Angeles, CA | GPO - $1.25<br>NTIS - PB 195 830 |
| 16110FRU12/71-1 | The River Basin Model: An Overview | GPO - $1.00 |
| 16110FRU12/71-2 | The River Basin Model: Director's Guide | GPO - $1.75 |
| 16110FRU12/71-3 | The River Basin Model: Economic Sector | GPO - $1.25 |
| 16110FRU12/71-4 | The River Basin Model: Social Sector | GPO - $1.25 |
| 16110FRU12/71-5 | The River Basin Model: Chairman and Council | GPO - 70¢ |
| 16110FRU12/71-6 | The River Basin Model: Assessment Department | GPO - 75¢ |
| 16110FRU12/71-7 | The River Basin Model: School Department | GPO - $1.00 |
| 16110FRU12/71-8 | The River Basin Model: Municipal Services Department | GPO - $1.00 |
| 16110FRU12/71-9 | The River Basin Model: Utility Department | GPO - $1.25 |
| 16110FRU12/71-10 | The River Basin Model: Highway Department | GPO - $1.00 |
| 16110FRU12/71-11 | The River Basin Model: Planning and Zoning Department | GPO - 75¢ |
| 16110FRU12/71-12 | The River Basin Model: Computer Output | GPO - $2.00 |
| 16110FRU12/71-13 | The River Basin Model: The Social Science Laboratory | GPO - $2.00 |
| 16110FRU12/71-14 | The River Basin Model: The Transportation Sector; by Envirometrics, Inc., Washington, D.C. | GPO - $1.00 |
| 16110FZE09/70 | Use of New Analytical Methods in Water Resource Development; by University of Texas at Austin | NTIS - PB 195 829 |
| 16110GNT02/72 | Development of a State Effluent Charge System; by Vermont Dept. of Water Resources, Agency of Environmental Conservation, Montpelier, VT | GPO - $1.75 |

1612 - Fate of Pollutants in Large Lakes

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|---|---|---|
| 16120HVR01/72 | Annotated Bibliography of Lake Ontario Limnological and Related Studies - Vol. I - Chemistry; by D. Proto and R. A. Sweeney, State Univ. College at Buffalo, NY | (Under review) |
| 16120HVR01/72 | Annotated Bibliography of Lake Ontario Limnological and Related Studies - Vol. II - Biology; by E. P. Downing, J. E. Hassan, and R. A. Sweeney, State Univ. College at Buffalo, NY | (Under review) |
| 16120HVR01/72 | Annotated Bibliography of Lake Ontario Limnological and Related Studies - Vol. III - Physical; by J. Baldwin and R. A. Sweeney, State Univ. College at Buffalo, NY | (Under review) |

1613 - Thermal Pollution

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|---|---|---|
| 16130---09/68 | Industrial Waste Guide on Thermal Pollution; by Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 197 262 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16130---12/68 | Experimental Study of Warm Water Flow Into Impoundments - Part I:<br>Part II:<br>Part III:<br>by St. Anthony Falls Hydraulic Lab., University of Minnesota, Minneapolis, MN | NTIS - PB 188 512<br>NTIS - PB 188 513<br>NTIS - PB 188 514 |
| 16130---09/69 | Working Paper No. 67; Economic Aspects of Thermal Pollution Control in the Electric Power Industry; by A. G. Christianson and B. A. Tichenor, Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 208 434 |
| 16130---04/70 | Guidelines: Biological Surveys at Proposed Heat Discharge Sites; by R. R. Garton, Pacific Northwest Water Lab., FWQA, Corvallis, Oregon and R. D. Harkins, Robert S. Kerr Water Research Center, FWQA, Ada, OK | GPO - $1.00<br>NTIS - PB 206 815 |
| 16130---10/70 | Thermoelectric Generators Powered by Thermal Waste From Electric Power Plants; by M. A. Shirazi, Pacific Northwest Water Lab., FWQA, Corvallis, OR | GPO - 45¢<br>NTIS - PB 207 870 |
| 16130DFX05/70 | An Engineering-Economic Study of Cooling Pond Performance; by Littleton Research and Engr., Littleton, MA | GPO - $1.50<br>NTIS - PB 206 817 |
| 16130DHS07/69 | A Survey of Alternate Methods for Cooling Condenser Discharge Water - Large Scale Heat Rejection Equipment; by Dynatech R/D Company, Cambridge, MA | GPO - $1.25<br>NTIS - PB 208 036 |
| 16130DHS08/70 | A Survey of Alternate Methods for Cooling Condenser Discharge Water - Operating Characteristics and Design Criteria; by Dynatech R/D Company, Cambridge, MA | GPO - $1.00<br>NTIS - PB 208 035 |
| 16130DHS11/70 | A Survey of Alternate Methods for Cooling Condenser Discharge Water - Total Community Considerations in the Utilization of Rejected Heat; by Dynatech R/D Company, Cambridge, MA | GPO - 65¢<br>NTIS - PB 206 816 |
| 16130DHS01/71 | A Survey of Alternate Methods for Cooling Condenser Discharge Water - System Selection, Design and Optimization; by Dynatech R/D Company, Cambridge, MA | GPO - $1.00 |
| 16130DJH01/71 | A Predictive Model for Thermal Stratification and Water Quality in Reservoirs; by Massachusetts Institute of Technology, Cambridge, MA | GPO - $2.00 |
| 16130DJH04/71 | Temperature Prediction in Stratified Water; Mathematical Model - User's Manual; by Ralph M. Parsons Lab., Massachusetts Institute of Technology, Cambridge, MA | GPO - $1.25 |
| 16130DJU02/71 | An Analytical and Experimental Investigation of Surface Discharge of Heated Water; by Massachusetts Institute of Technology, Cambridge, MA | GPO - $1.75<br>NTIS - PB 210 134 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16130DNE03/71 | Advanced Nonthermally Polluting Gas Turbines in Utility Application; by United Aircraft Corp., East Hartford, CT | GPO - $2.00 |
| 16130DNH01/71 | Potential Environmental Modifications Produced by Large Evaporative Cooling Towers; by E G & G, Inc., Boulder, CO | GPO - 75¢ |
| 16130DPU02/71 | Research on the Physical Aspects of Thermal Pollution; by Cornell Aeronautical Lab., Inc., Buffalo, NY | GPO - $1.75<br>NTIS - PB 210 124 |
| 16130DWO10/70 | Mathematical Models for the Prediction of Temperature Distributions Resulting from the Discharge of Heated Water into Large Bodies of Water; by Tetra Tech. Inc., Pasadena, CA | GPO - $1.75<br>NTIS - PB 208 034 |
| 16130EES11/70 | Research on Dry-Type Cooling Towers for Thermal Electric Generation, Part I;<br>Part II;<br>by R. W. Beck & Associates, Denver, CO | GPO - $2.50<br>NTIS - PB 206 954<br>GPO - $1.00 |
| 16130ENT12/69 | Thermal Pollution; Status of the Art; by Vanderbilt University, Nashville, TN | (Vanderbilt - $4.00) |
| 16130EXT12/69 | Mathematical Models for the Prediction of Thermal Energy Change in Impoundments; by Water Resources Engineers Inc., Walnut Creek, CA | GPO - $1.50<br>NTIS - PB 210 126 |
| 16130FDQ03/71 | Effect of Geographical Location on Cooling Pond Requirements and Performance; by Vanderbilt University, Nashville, TN | GPO - $2.00<br>NTIS - PB 208 031 |
| 16130FDQ03/71 | Heated Surface Jet Discharged into a Flowing Ambient Stream; by L. H. Motz and B. A. Benedict, Vanderbilt University, Nashville, TN | GPO - $1.75 |
| 16130FHJ09/70 | Beneficial Uses of Waste Heat - An Evaluation; by Northwest Water Research Lab., FWQA, Corvallis, OR | NTIS - PB 201 724 |
| 16130FSU12/71 | Surface Discharge of Heated Water; by H. Stefan, N. Hayakawa, and F. R. Schiebe, St. Anthony Falls Hydraulic Lab., Univ. of Minnesota, Minneapolis, MN | GPO - $2.00 |
| 16130GFI06/71 | Potential Environmental Effects of an Offshore Submerged Nuclear Power Plant,<br>Vol. I;<br>Vol. II;<br>by General Dynamics, Electric Boat Div., Groton, CT | GPO - $2.50<br>NTIS - PB 208 281<br>GPO - $2.25<br>NTIS - PB 208 282 |
| 16130GKF12/70 | A Method for Predicting the Performance of Natural Draft Cooling Towers; by Pacific Northwest Water Lab., EPA, Corvallis, OR | GPO - 70¢<br>NTIS - PB 210 125 |

| Report Number | Title/Author | Source |
|---|---|---|
| 16130GNK10/71 | Development and Demonstration of Low-Level Drift Instrumentation; by Environmental Systems Corp., Knoxville, TN | GPO - 65¢ |

## Waste Treatment and Ultimate Disposal

### 1701 - Dissolved Nutrient Removal

| | | |
|---|---|---|
| 17010---10/68 | Dilute Solution Reactions of the Nitrate Ion as Applied to Water Reclamation; by Rocketdyne, Div. of North American Rockwell Corporation, Canoga Park, CA | NTIS - PB 190 195 |
| 17010---01/70 | Treatment Techniques for Removing Phosphorus from Municipal Wastewaters; by J. J. Convery, AWTR Lab., FWQA, Cinn., OH | GPO - 50¢<br>NTIS - PB 199 072 |
| 17010---02/70 | An Electrochemical Method for Removal of Phosphates from Wastewater; by Dynatech Corp., Cambridge, MA | GPO - 50¢ |
| 17010---10/70 | Nitrogen Removal from Wastewaters; by Advanced Waste Treatment Lab., FWQA, Cincinnati, OH | NTIS - PB (Pending) |
| 17010DBL12/70 | Colloid Flotation and Adsorbing Colloid Flotation; by Northeastern University, Boston, MA | NTIS - PB 205 001 |
| 17010DDQ11/71 | Mechanisms of Biological Luxury Phosphate Uptake; by Dept. of Microbiology and Medical Technology, Univ. of Arizona, Tucson, AZ | GPO - $1.00 |
| 17010DFV09/70 | Phosphate Study at the Baltimore Back River Wastewater Treatment Plant; by City of Baltimore, MD | GPO - $1.50<br>NTIS - PB 199 363 |
| 17010DHK08/69 | Chemical Exfoliated Vermicolite for Removal of Phosphate from Wastewaters; by J. Block, W. R. Grace & Co., Clarksville, MD | GPO - 50¢<br>NTIS - PB 196 740 |
| 17010DHT09/70 | Methanol Requirement and Temperature Effects in Wastewater Denitrification; by Gulf South Research Institute, New Iberia, LA | GPO - 50¢<br>NTIS - PB 198 221 |
| 17010DJA11/70 | Investigation of a New Phosphate Removal Process; by Envirogenics Co., El Monte, CA | GPO - 75¢<br>NTIS - PB 203 069 |
| 17010DRD07/70 | A Study of Nitrification & Denitrification; by Aerojet-General Corp., El Monte, CA | GPO - $1.00<br>NTIS - PB 197 658 |
| 17010DXD08/70 | Phosphorus Removal by an Activated Sludge Plant; by Sewerage Commission of the City of Milwaukee, WI | GPO - $1.00 |
| 17010DYB02/71 | Phosphorus Removal and Disposal from Municipal Wastewater; by Univ. of Texas Medical Branch, Galveston, TX | GPO - $1.25 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17010EAP10/70 | Feasibility of Liquid Ion Exchange for Extracting Phosphate from Wastewater; by General Mills Chemicals Inc., Minneapolis, MN | GPO - 50¢<br>NTIS - PB 205 360 |
| 17010ECZ03/69 | Ammonia Removal from Agricultural Runoff and Secondary Effluents by Selected Ion Exchange; by Battelle Memorial Institute, Richland, WA | NTIS - PB 187 759 |
| 17010ECZ02/71 | Wastewater Ammonia Removal by Ion Exchange; by Battelle Northwest, Richland, Washington, and South Tahoe Public Utility District, South Lake Tahoe, CA | GPO - $1.25<br>NTIS - PB 209 934 |
| 17010EDO06/70 | Phosphorus Removal Using Chemical Coagulation and a Continuous Countercurrent Filtration Process; by Johns-Manville Products Corp., Manville, NJ | GPO - 65¢<br>NTIS - PB 196 734 |
| 17010EED07/70 | The Electro-Oxidation of Ammonia in Sewage to Nitrogen; by Ionics, Inc., Watertown, MA | GPO - 55¢<br>NTIS - PB 204 526 |
| 17010EER06/70 | Mobile Pilot Plant for Removal of Phosphate from Wastewaters by Adsorption on Alumina; by Battelle Institute, Richland, WA | NTIS - PB (Pending) |
| 17010EEX10/70 | Development of a Chemical Denitrification Process; by Rocketdyne Research, North American Rockwell, Canoga Park, CA | GPO - 65¢<br>NTIS - PB 203 597 |
| 17010EFX04/70 | Phosphate Removal from Wastewaters Using Lanthanum Precipitation; by Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA | GPO - 55¢<br>NTIS - PB 196 738 |
| 17010EIP05/71 | Soluble Phosphorus Removal in the Activated Sludge Process, Part I; Chemical-Biological Process Performance; by The Soap and Detergent Association, New York, NY | GPO - $1.25 |
| 17010EIP10/71 | Soluble Phosphorus Removal in the Activated Sludge Process, Part II; Sludge Digestion Study; by The Soap and Detergent Asso., New York, NY | GPO - 65¢ |
| 17010EKI04/70 | Kinetics and Mechanism of Precipitation and Nature of the Precipitate Obtained in Phosphate Removal from Wastewater Using Aluminum (III) and Iron (III) Salts; by Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA | GPO - 75¢<br>NTIS - PB 196 737 |
| 17010EKI09/71 | Phosphate Precipitation with Ferrous Iron; by M. Ghassimi and H. L. Recht, Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA | GPO - 70¢<br>NTIS - PB 209 939 |
| 17010ELQ08/71 | Advanced Wastewater Treatment as Practiced at South Tahoe; by South Tahoe Public Utility District, South Lake Tahoe, CA | GPO - $3.25<br>NTIS - PB 204 525 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17010EVB11/70 | Process Alternatives for Removal of Carbonaceous, Nitrogenous, and Phosphorus Materials from Concentrated Waste Streams; by Engineering-Science, Inc., Oakland, CA | GPO - 35¢ |
| 17010FAH07/70 | Development of Phosphate Removal Processes; by Detroit Metro. Water Dept., Detroit, MI | GPO - 65¢<br>NTIS - PB 203 192 |
| 17010FJY02/69 | Alumina Columns for Selective Removal of Phosphorus from Wastewater; by Pacific Northwest Lab., Battelle Memorial Inst., Richland, WA | NTIS - PB 189 405 |
| 17010FKA05/70 | Development of a Pilot Plant to Demonstrate Removal of Carbonaceous, Nitrogenous and Phosphorus Materials from Anaerobic Digester Supernatant and Related Process Streams; by FMC Corp., Santa Clara, CA | GPO - $1.00<br>NTIS - PB 196 733 |
| 17010FKF12/69 | Basic Salinogen Ion-Exchange Resin for Selected Nitrate Removal from Potable and Effluent Waters; by Tyco Labs, Waltham, MA | GPO - $1.00<br>NTIS - PB 196 735 |
| 17010FMX01/71 | Nitrification and Denitrification of Wastewaters; by University of Minnesota, Minneapolis, MN | NTIS - PB 202 350 |
| 17010FSJ01/71 | Nitrate Removal from Wastewater by Ion Exchange; by Dow Chemical Co., Walnut Creek, CA | GPO - $1.00<br>NTIS - PB 204 527 |

1702 - Dissolved Refractory Organics Removal

| | | |
|---|---|---|
| 17020---12/68 | An Investigation of Light-Catalyzed Chlorine Oxidation for Treatment of Wastewater; by Midwest Research Institute, Kansas City, MO | NTIS - PB 187 757 |
| 17020---12/68 | A Comparison of Expanded-Bed and Packed-Bed Adsorption Systems; by FMC Corporation Santa Clara, CA | NTIS - PB 187 756 |
| 17020---04/69 | Ozone Treatment of Secondary Effluent from Wastewater Treatment Plants; by Air Reduction Co., Inc., Murray Hill, NJ | NTIS - PB 187 758 |
| 17020---02/70 | The Soil Filter: A Treatment Process for Removal of Odorous Gases; by University of Washington, Seattle, WA | NTIS - PB 202 580 |
| 17020---06/70 | Effect of Surface Groups on Adsorption of Pollutants; by Lehigh Univ., Bethlehem, PA | GPO - 40¢<br>NTIS - PB 198 519 |
| 17020DAO02/69 | Regeneration of Spent Granular Activated Carbon; by MSA Research Corp., Evans City, PA | NTIS - PB 189 955 |
| 17020DAO07/70 | Optimization of the Regeneration Procedure for Granular Activated Carbon; by Mine Safety Appliances Research Corp., Evans City, PA | GPO - $1.25<br>NTIS - PB 208 205 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17020DBA03/70 | Ultrafiltrative Dewatering of Spent Powdered Carbon; by Amicon Corporation, Lexington, MA | GPO - 70¢<br>NTIS - PB 197 865 |
| 17020DDC06/71 | Effect of Porous Structure on Carbon Activation; by Chemical Engineering Dept., University of Colorado, Boulder, CO | GPO - $1.00<br>NTIS - PB 210 145 |
| 17020DHR12/70 | Use of Improved Membranes in Tertiary Treatment by Reverse Osmosis; by McDonnell Douglas Corp., Newport Beach, CA | NTIS - PB 203 206 |
| 17020DNQ09/69 | Study of Powdered Carbons for Waste Water Treatment and Methods for Their Applications; by West Virginia Pulp and Paper Co., Covington, WV | NTIS - PB 191 538 |
| 17020DUD09/70 | New Technology for Treatment of Wastewater by Reverse Osmosis; by Envirogenics Co, Div. of Aerojet-General, El Monte, CA | GPO - 70¢<br>NTIS - PB 199 362 |
| 17020DUE09/70 | Light-Catalyzed Chlorine Oxidation for Treatment of Wastewater; by Midwest Research Institute, Kansas City, MO | GPO - $1.00<br>NTIS - PB 202 230 |
| 17020DVJ05/69 | Appraisal of Granular Carbon Contacting;<br>Phase I & II;<br>Phase III;<br>by Swindell-Dressler Co., Pittsburgh, PA | <br>NTIS - PB 190 168<br>NTIS - PB 190 167 |
| 17020DZO11/70 | Carbon Column Operation in Waste Water Treatment; by Syracuse Univ., Syracuse, NY | NTIS - PB 202 579 |
| 17020ECI11/71 | Feasibility Studies of Applications of Catalytic Oxidation in Wastewater; by Southern Illinois University, Carbondale, IL | GPO - 75¢<br>NTIS - PB 208 348 |
| 17020EFA10/70 | New and Ultrathin Membranes for Municipal Wastewater Treatment by Reverse Osmosis; by North Star Research & Development Institute, Minneapolis, MN | GPO - 70¢<br>NTIS - PB 202 237 |
| 17020FBD03/70 | The Development of a Fluidized-Bed Technique for the Regeneration of Powdered Activated Carbon; by Battelle Memorial Institute, Columbus, OH | GPO - 55¢<br>NTIS - PB 197 892 |
| 17020FKB07/70 | Advanced Wastewater Treatment Using Powdered Activated Carbon in Recirculating Slurry Contactor-Clarifiers; by C. F. Garland and R. L. Beebe, Infilco, Tucson, AZ | GPO - 75¢<br>NTIS - PB 197 890 |
| 17020GDN07/71 | Improving Granular Carbon Treatment; by FMC Corp., Princeton, NJ | GPO - $1.00 |

1703 - Suspended and Colloidal Solids Removal

| | | |
|---|---|---|
| 17030EOH01/70 | Application of Hyperfiltration to Treatment of Municipal Sewage Effluents; by Oak Ridge National Lab., Oak Ridge, TN | GPO - 70¢<br>NTIS - PB 197 671 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17030ESX04/70 | Investigation of a High-Pressure Foam Wastewater Treatment Process; by Garrett Research and Development Co., Inc., LaVerne, CA | GPO - 45¢<br>NTIS - PB 197 863 |
| 17030FEB02/72 | Fluidic Vortex Bubble Generator; by Bowles Fluidics Corp., Silver Spring, MD | GPO - $1.00 |
| 17030FWH01/72 | Filtration of Municipal Waste With a Moving Bed Contactor; by F. O. Mixon, Research Triangle Institute, Environmental Studies Center, Research Triangle Park, NC | GPO - 60¢ |

1704 - Dissolved Inorganics Removal

| | | |
|---|---|---|
| 17040---05/70 | Study and Experiments in Waste Water Reclamation by Reverse Osmosis; by Gulf General Atomic, Inc., San Diego, CA | GPO - $1.25<br>NTIS - PB 198 092 |
| 17040---05/70 | Renovation of Municipal Wastewater by Reverse Osmosis; by AWTR Lab., FWQA, Cincinnati, OH and Los Angeles County Sanitation District, Los Angeles, CA | GPO - 65¢<br>NTIS - PB 199 067 |
| 17040DFC10/70 | Feasibility Study of Regenerative Fibers for Water Pollution Control; by Uniroyal, Inc., Wayne, NJ | GPO - 75¢<br>NTIS - PB 208 821 |
| 17040DNM02/71 | Feasibility of Treating Wastewater by Distillation; by University of Florida, Gainesville, FL | GPO - $1.00<br>NTIS - PB 206 145 |
| 17040EEE12/71 | Wastewater Demineralization by Ion Exchange; by E. Kreusch and K. Schmidt, Culligan International Co., Northbrook, IL | GPO - $1.25<br>NTIS - PB 209 935 |
| 17040EFO06/70 | Membrane Materials for Wastewater Reclamation by Reverse Osmosis; by Gulf General Atomic, San Diego, CA | GPO - 65¢<br>NTIS - PB 197 448 |
| 17040EFQ12/69 | Reverse Osmosis Renovation of Municipal Wastewater; by Aerojet-General Corp., El Monte, CA | GPO - $1.50<br>NTIS - PB 197 659 |
| 17040EFQ02/71 | Reverse Osmosis Renovation of Primary Sewage; by Aerojet-General Corp., El Monte, CA | GPO - 65¢<br>NTIS - PB 207 645 |
| 17040EUE07/71 | Amenability of Reverse Osmosis Concentrate to Activated Sludge Treatment; by Rex Chainbelt, Inc., Milwaukee, WI | GPO - $1.25 |
| 17040EUN02/71 | Demineralization of Wastewater by the Transport-Depletion Process; by Southern Research Institute, Birmingham, AL | GPO - 65¢<br>NTIS - PB 206 191 |

| Report Number | Title/Author | Source |
|---|---|---|
| 1705 - Dissolved Biodegradable Organics Removal | | |
| 17050---07/68 | Evaluation of Waste Treatment System Chemawa Indian School; by B. D. Clark and K. A. Dostal, Pacific Northwest Water Lab., FWPCA, Corvallis, OR | NTIS - PB 208 435 |
| 17050---10/69 | Photolysis Mechanisms for Pollution Abatement; by IIT Research Institute, Chicago, IL | NTIS - PB 190 169 |
| 17050---00/70 | Characteristics and Kinetics of Biological Fixed Film Reactors; by Clemson Univ., Clemson, SC | NTIS - PB 199 834 |
| 17050DAL05/70 | Granular Carbon Treatment of Raw Sewage; by FMC Corporation, Princeton, NJ | GPO - $1.00<br>NTIS - PB 197 864 |
| 17050DAM05/69 | Municipal Sewage Treatment with a Rotating Biological Contactor; by Allis-Chalmers Research Div., Milwaukee, WI | NTIS - PB 201 701 |
| 17050DAM11/71 | Application of Rotating Disc Process to Municipal Wastewater Treatment; by Autotrol Corp., Milwaukee, WI | GPO - 75¢ |
| 17050DDY12/71 | A Literature Search and Critical Analysis of Biological Trickling Filter Studies, Vol. I; by Functional Products and Systems Dept., The Dow Chemical Co., Midland, MI | GPO - $2.50 |
| 17050DDY12/71 | A Literature Search and Critical Analysis of Biological Trickling Filter Studies, Vol. II; by Functional Products and Systems Dept., The Dow Chemical Co., Midland, MI | GPO - $2.75 |
| 17050DHI09/70 | Isolation of Lytic Agents Related to Sphaerotilus; by D. J. Geason, Randolph-Macon Woman's College, Lynchburg, VA | NTIS - PB (Pending) |
| 17050DJS05/71 | Oxygen Consumption in Continuous Biological Culture; by Center for Research, Inc., University of Kansas, Lawrence, KS | GPO - $1.25<br>NTIS - PB 208 349 |
| 17050DNW05/70 | Investigation of the Use of High-Purity Oxygen Aeration in the Conventional Activated Sludge Process; by Union Carbide Corp., Linde Div., Tonawanda, NY | NTIS - PB 194 241 |
| 17050DNW02/72 | Continued Evaluation of Oxygen Use in Conventional Activated Sludge Processing; by Union Carbide Corp., Linde Division, Tonawanda, NY | GPO - $1.50<br>NTIS - PB 209 940 |
| 17050DVO09/71 | Water Budget for the City of Laramie, Wyoming; by P. A. Rechard, Water Resources Research Inst., University of Wyoming, Laramie, WY | GPO - 50¢<br>NTIS - PB 208 819 |
| 17050DVO10/71 | Supplementary Aeration of Lagoons in Rigorous Climate Areas; by R. L. Champlin, Dept. of Civil Engineering, Univ. of Wyoming, Laramie, WY | GPO - 75¢<br>NTIS - PB 208 204 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17050EEO03/71 | Integrated Activated Sludge Biological Filter Process; by City of San Buenaventura, CA | NTIS - PB 206 794 |
| 17050EJB11/70 | Full-Scale Raw Wastewater Flocculation with Polymers; by P. V. Freese and E. Hicks, D. C. Dept. of Sanitary Engineering, Washington, D.C. | GPO - 60¢ |
| 17050EOY01/72 | Biomass Determination - A New Technique for Activated Sludge Control; by Biospherics, Inc., Rockville, MD | GPO - $1.25 |
| 17050EVF02/71 | Automatic Control of an Activated Sludge Reactor; by University of Connecticut, Storrs, CT | NTIS - PB (Pending) |
| 17050FIM05/70 | Optimizing Lipid Biostabilization; by Midwest Research Institute, Kansas City, MO | GPO - 60¢<br>NTIS - PB 197 893 |
| 1707 - Ultimate Disposal | | |
| 17070---05/68 | A Study of Sludge Handling and Disposal; by R. S. Burd, FWPCA, Washington, D.C. (formerly with Dow Chemical Co.) | NTIS - PB 179 514 |
| 17070---09/69 | Controlling Factors in Methane Fermentation; by New Mexico State University, Las Cruces, NM | NTIS - PB 206 237 |
| 17070DAU12/71 | Aerobic Digestion of Organic Waste Sludge; by College of Engineering, Oklahoma State University, Stillwater, OK | GPO - $1.50 |
| 17070DFK02/70 | The Biochemistry of Anaerobic Digestion; by Manhattan College, Bronx, NY | NTIS - PB 198 655 |
| 17070DHO02/71 | DNA Concentration as an Estimate of Sludge Biomass; by Southwest Missouri State College, Springfield, MO | GPO - 40¢<br>NTIS - PB 203 070 |
| 17070DJW11/69 | State of the Art Review on Product Recovery; by Resources Engineering Association, Wilton, CT | NTIS - PB 192 634 |
| 17070DLV04/70 | State of the Art Review on Sludge Incineration Practice; by Resources Engineering Associates, Wilton, CT | GPO - $1.25<br>NTIS - PB 197 888 |
| 17070DLY05/70 | Disposal of Brines Produced in Renovation of Municipal Wastewater; by Burns and Roe, Inc., Oradell, NJ | GPO - $1.25<br>NTIS - PB 197 597 |
| 17070DRP12/70 | Development of Techniques for Estimating the Bacterial Population of Sewage Sludge; by W. Spangler, and W. Langston, Midwest Research Institute, Kansas City, MO | GPO - $1.00 |
| 17070DUQ07/70 | Pipeline Flow of Solids-Liquid Suspensions; by Syracuse University, Syracuse, NY | NTIS - PB 199 708 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17070DYF09/70 | A Study of Sludge Digestion with Sodium Chloride and Sulfate; by Georgia Institute of Technology, Atlanta, GA | NTIS - PB 196 732 |
| 17070EBP07/71 | Computerized Design and Cost Estimation for Multiple-Hearth Sludge Incinerators; by Dr. W. Unterberg, R. J. Sherwood, and Dr. G. R. Schneider, Rocketdyne Div., North American Rockwell Corp., Canoga Park, CA | GPO - $1.50 |
| 17070EHE07/70 | Electroosmotic Pumping for Dewatering Sewage Sludge; by Rocketdyne Div. of North American Rockwell Corp., Canoga Park, CA | GPO - 65¢<br>NTIS - PB 197 889 |
| 17070EKN12/69 | Feasibility of Hydrolysis of Sludge Using Low Pressure Steam with SO2 as a Hydralytic Adjunct and Utilization of the Resulting Hydrosate; by Foster D. Snell, Inc., Florham Park, NJ | NTIS - PB 194 784 |
| 17070ESJ01/70 | Ultimate Disposal of Phosphate from Waste Water by Recovery as Fertilizer; by Dearborn Chemical Div., W. R. Grace and Co., Chicago, IL | GPO - 70¢<br>NTIS - PB 196 739 |
| 17070EVY08/71 | Biological Methods of Sludge Dewatering; by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, CA | NTIS - PB 207 480 |
| 1708 - Waste Water Renovation and Reuse | | |
| 17080DAR09/71 | Optimization of Ammonia Removal by Ion Exchange Using Clinoptilolite; by Sanitary Engineering Research Lab., College of Engineering, and School of Public Health, Univ. of California, Berkeley, CA | GPO - $1.50 |
| 17080ESH08/68 | Waste Water Reclamation Project for Antelope Valley Area; by Dept. of County Engineer, County of Los Angeles, CA | NTIS - PB 191 067 |
| 1709 - Waste Treatment Optimization | | |
| 17090---12/67 | A Compilation of Cost Information for Conventional and Advanced Wastewater Treatment Plants and Processes; by R. Smith, AWTR Lab., FWPCA, Cincinnati, OH | NTIS - PB 206 430 |
| 17090---12/68 | Cost of Wastewater Treatment Processes; by Dorr-Oliver, Inc., Stamford, CT | NTIS - PB 187 760 |
| 17090---06/69 | Cost and Performance Estimates for Tertiary Wastewater Treating Processes; by Robert A. Taft Water Research Center, Cincinnati, OH | NTIS - PB 189 953 |
| 17090---10/69 | A Generalized Computer Model for Steady-State Performance of the Activated Sludge Process; by Robert A. Taft Water Research Center, Cincinnati, OH | NTIS - PB 192 764 |

| Report Number | Title/Author | Source |
|---|---|---|
| 17090---07/70 | Cost to the Consumer for Collection and Treatment of Wastewater; by R. Smith and R. G. Eilers, The AWTR Lab., EPA, Cincinnati, OH | GPO - $1.00<br>NTIS - PB 210 199 |
| 17090DAN10/71 | Estimating Costs and Manpower Requirements for Conventional Wastewater Treatment Facilities; by W. L. Patterson, R. F. Banker; Black & Veatch Consulting Engineers, Kansas City, MO | GPO - $2.00 |
| 17090DOY12/70 | Feasibility of Computer Control of Wastewater Treatment; by American Public Works Association, Chicago, IL | GPO - $1.00<br>NTIS - PB 203 962 |
| 17090EEM12/71 | Investigation of Response Surfaces of the Microscreen Process; by Engineering-Science, Inc., Cincinnati, OH | GPO - $1.25 |
| 17090EHQ09/69 | Mathematical Model of Sewage Sludge Fluidized Bed Incinerator Capacities and Costs; by General American Transportation Corp. and General American Research Div., Niles, IL | NTIS - PB 189 295 |
| 17090EHQ09/70 | Mathematical Model of Recalcination of Lime Sludge with Fluidized Bed Reactors; by General American Transportation Corp., Niles, IL | GPO - 55¢<br>NTIS - PB 197 891 |
| 17090EHX07/71 | Waste Treatment Lagoons - State of the Art; by Missouri Basin Engineering Health Council, Cheyenne, WY | GPO - $1.25<br>NTIS - PB 209 937 |
| 17090FJW02/72 | A Mathematical Model of a Final Clarifier; by Rex Chainbelt, Inc., Milwaukee, WI | GPO - $1.00<br>NTIS - PB 209 933 |
| 17090FKC09/69 | Mathematical Model of Tertiary Treatment by Lime Addition; by General American Transportation Corp., General American Research Division, Niles, IL | NTIS - PB 190 170 |
| 17090FQJ09/71 | Biological Concepts for Design and Operation of the Activated Sludge Process; by A. F. Gaudy, Jr., and E. T. Gaudy, Oklahoma State University, Stillwater, OK | GPO - $1.25 |
| 17090FTA07/69 | Mathematical Model of Electrodialysis Process; by Process Research Inc., Cambridge, MA | GPO - 70¢<br>NTIS - PB 200 721 |

## Water Quality Requirements Research

### 1801 - Municipal Uses

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|---|---|---|
| 18010DPV12/70 | Water Quality Criteria Data Book, Vol. I - Organic Chemical Pollution of Freshwater; by Arthur D. Little, Inc., Cambridge, MA | GPO - $3.50<br>NTIS - PB 208 987 |

| Report Number | Title/Author | Source |
|---|---|---|
| 18010DPV07/71 | Water Quality Criteria Data Book, Vol. 2 - Inorganic Chemical Pollution of Freshwater; by Arthur D. Little, Inc., Cambridge, MA | GPO - $2.25<br>NTIS - PB 208 988 |
| 1805 - Freshwater Fishes, Other Freshwater Life and Wildlife | | |
| 18050---03/70 | Effects of Abatement of Domestic Sewage Pollution on the Benthos, Volumes of Zooplankton, and the Fouling Organisms of Biscayne Bay, Florida; by K. McNulty, Institute of Marine and Atmospheric Sciences, Univ. of Miami, Miami, FL | (Univ. of Miami) |
| 18050DAI02/70 | Biological Effects of Effluent from a Desalination Plant at Key West, Florida; by Westinghouse Electric Corp., Pittsburgh, PA | GPO - $1.00<br>NTIS - PB 195 677 |
| 18050DBB12/71 | Industrial Wastes: Effects on Trinity River Ecology, Fort Worth, Texas; by Texas Christian Univ., Dept. of Biology, Fort Worth, TX | (At press) |
| 18050DBM02/72 | Lake Superior Periphyton in Relation to Water Quality; by T. A. Olson and T. O. Odlang, University of Minnesota, Minneapolis, MN | GPO - $2.00 |
| 18050DIE12/71 | The Ecology of Diatoms in Hardwater Habitats; by J. D. Dodd, Dept. of Botany and Plant Pathology, Iowa State University, Ames, IA | GPO - 65¢ |
| 18050DKC12/69 | Plankton Diatom Assemblages in Lake Michigan; by Univ. of Michigan, Ann Arbor, MI | GPO - $2.00<br>NTIS - PB 198 087 |
| 18050DLW04/71 | Biological Effects of Copper and Arsenic Pollution; by University of Alaska, College, AK | NTIS - PB 201 648 |
| 18050DOH06/71 | Stream Faunal Recovery After Manganese Strip Mine Reclamation; by Bureau of Sport Fisheries, Virginia Polytechnic Institute, Blacksburg, VA | GPO - 50¢<br>NTIS - PB 206 184 |
| 18050DOL03/70 | Bactericidal Effects of Algae on Enteric Organisms; by Univ. of Texas, Austin, TX | GPO - $1.25<br>NTIS - PB 197 862 |
| 18050DST12/70 | Toxic Action of Water Soluble Pollutants on Freshwater Fish; by Michigan State University, East Lansing, MI | GPO - 65¢<br>NTIS - PB 201 650 |
| 18050DWC12/70 | The Effect of Inorganic Sediment on Stream Biota; by DePauw Univ., Greencastle, IN | GPO - $1.25<br>NTIS - PB 204 236 |
| 18050DXJ05/71 | Histochemical and Cytophotometric Assay of Acid Stress in Freshwater Fish; by Pennsylvania State Univ., University Park, PA | GPO - $1.25 |

| Report Number | Title/Author | Source |
|---|---|---|
| 18050DXU06/70 | Sensitivity of Benthic Microflora to Pollution Gradients; by Prof. N. Marshal, Univ. of Rhode Island; Prof. D. M. Skauen, Univ. of Connecticut; Dr. C. A. Orviatt, Univ. of Rhode Island | NTIS - PB 192 853 |
| 18050DZZ06/71 | Biological Survey of Streams of Coles County, Illinois, 1967-1970; by Eastern Illinois Univ., Charleston, IL | GPO - $1.25 |
| 18050EBK02/71 | Responses of Teleost Fish to Environmental Stress; by University of Washington, Seattle, WA | GPO - $1.25<br>NTIS - PB 208 968 |
| 18050EDP12/71 | The Use of Fish Movement Patterns to Monitor Zinc; by J. Cairns, Jr. and W. T. Waller, Virginia Polytechnic Inst. and State Univ., Blacksburg, VA | GPO - 55¢ |
| 18050EDQ12/71 | The Use of Bluegills to Detect Zinc; by J. Cairns, Jr. and R. E. Sparks, Virginia Polytechnic Institute and State University, Blacksburg, VA | GPO - 55¢ |
| 18050EEC12/71 | Acid Mine Pollution Effects on Lake Biology; by R. W. Smith and D. G. Frey, Water Resources Research Center, Indiana Univ., Bloomington, IN | GPO - $1.25 |
| 18050ELD02/72 | Biota of Freshwater Ecosystems - Identification Manual No. 1 - Freshwater Planarians (Turbellaria) of North America; by R. Kenk, Dept. of Invertebrate Zoology, Smithsonian Institution, Washington, D.C. | (At press) |
| 18050ELD02/72 | Biota of Freshwater Ecosystems - Identification Manual No. 2 - The Genus Argulus (Crustacia: Branchitura) of The United States; by R. F. Cressey, Smithsonian Institute, Washington, D.C. | (At press) |
| 18050ELD03/72 | Biota of Freshwater Ecosystems - Identification Manual No. 3 - Freshwater Sphaeriacean Clams (Mollusca: Pelecypoda) of North America; by J. B. Burch, Museum of Zoology, Univ. of Michigan, Ann Arbor, MI | (At press) |
| 18050ELD03/72 | Biota of Freshwater Ecosystems - Identification Manual No. 4 - Freshwater Polychaetes (Annelida) of North America; by N. Foster, Dept. of Biology, Dunbarton College, Washington, D.C. | (At press) |
| 18050ELD04/72 | Biota of Freshwater Ecosystems - Identification Manual No. 5 - The Freshwater Amphipod Crustaceans (Gammaridae) of North America; by J. R. Holsinger, Dept. of Biology, Old Dominion University, Norfolk, VA | (At press) |

| Report Number | Title/Author | Source |
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| 18050ELD04/72 | Biota of Freshwater Ecosystems - Identification Manual No. 6 - Aquatic Dryopoid Beetles (Coleoptera) of the United States; by H. P. Brown, Dept. of Zoology, Univ. of Oklahoma, Norman, OK | (At press) |
| 18050ELD05/72 | Biota of Freshwater Ecosystems - Identification Manual No. 7 - Freshwater Isopods (Asellidae) of North America; by W. D. Williams, Dept. of Zoology, Monash Univ., Clayton, Victoria, Australia | (At press) |
| 18050ELD05/72 | Biota of Freshwater Ecosystems - Identification Manual No. 8 - Freshwater Leeches (Annelida; Hirudinea) of North America; by D. J. Klemm, Museum of Zoology, Univ. of Michigan, Ann Arbor, MI | (At press) |
| 18050ELD05/72 | Biota of Freshwater Ecosystems - Identification Manual No. 9 - Crayfishes (Astacidae) of North and Middle America; by H. H. Hobbs, Jr., Dept. of Invertebrate Zoology, Smithsonian Inst., Washington, DC | (At press) |
| 18050EUJ12/70 | Temperature Control in Outdoor Experimental Ponds; by Univ. of Minnesota, St. Anthony Falls Hydraulic Lab., Minneapolis, MN | NTIS - PB 199 364 |
| 18050GWV05/71 | Water Quality Criteria Data Book, Vol. 3 - Effects of Chemicals on Aquatic Life; by Battelle Columbus Lab., Columbus, OH | GPO - $3.75 |
| 18050GZZ10/71 | Chlorinated Municipal Waste Toxicities to Rainbow Trout and Fathead Minnows; by Michigan Department of Natural Resources, Lansing, MI | GPO - 60¢<br>NTIS - PB 209 890 |

1808 - Marine Fishes, Other Marine Life and Wildlife

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| 18080GBX12/71 | Biological Impact of a Large-Scale Desalination Plant at Key West; by R. H. Chesher, Westinghouse Ocean Research Laboratory, Annapolis, MD | GPO - $1.25 |